

BADGER STATE

Smoke Signals

For Radio Amateurs • By Radio Amateurs

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Vol. 22 No. 8 - 260th Consecutive Monthly Issue - Baraboo, Wisconsin - August 1991

When Radio Amateurs operate under conditions they would never otherwise tolerate, it must be....

Field Day!



The fourth full weekend in June brings hordes of hams in the U.S. and Canada from the comfort of their shacks to the domain of bugs, critters, sometimes sputtering generators, quaint comfort stations, cranky rigs (and sometimes, operators), to take part in Field Day, sponsored by the American Radio Relay League. Above, Ralph Tramm, WT9P, operates 40 meters and computer-dupes his contacts at the Field Day site of W9FK, the West Allis Radio Amateur Club. He is Board Chairman and Chief Instructor of the WARAC. A summary of Field Day, with some photos, begins on page 6 of this issue.

- Photo by Dave Knaus/WA9POV

Senator Gore Introduces Spectrum Protection Bill

Legislation to protect amateur spectrum can now move forward in parallel, rather than in series. Senate Bill 1372 (virtually identical to House Bill H.R. 73, The Amateur Radio Spectrum Protection Act of 1991) was introduced on June 25 by Senator Al Gore, D-TN, for himself and Senators Carl Levin, D-MI, an active supporter of radio amateurs in (at least) the past three Congresses, and Joseph Lieberman, D-CT, a first-term Senator who's clearly in our corner.

Senator Gore is a member of the Senate Committee on Commerce, Science and Transportation and its Subcommittee on Communications, which have initial jurisdiction over the bill.

Arthur Kay, W5APX; Tim Marsh, W4IWV; and Bernice Martin, all of Shelbyville, Tennessee, were among those who brought the matter to Senator Gore's attention. Tennessee Congressman Jim Cooper (D-4th District) and his staff also provided encouragement once the idea was planted.

The text of S. 1372 is a close cousin to Rep. Cooper's Amateur Radio Spectrum Act of 1991, H.R. 73. Like its companion, the new bill mandates:

"....The Federal Communications Commission shall not diminish existing allocations of spectrum to the Amateur Radio Service after January 1, 1991.

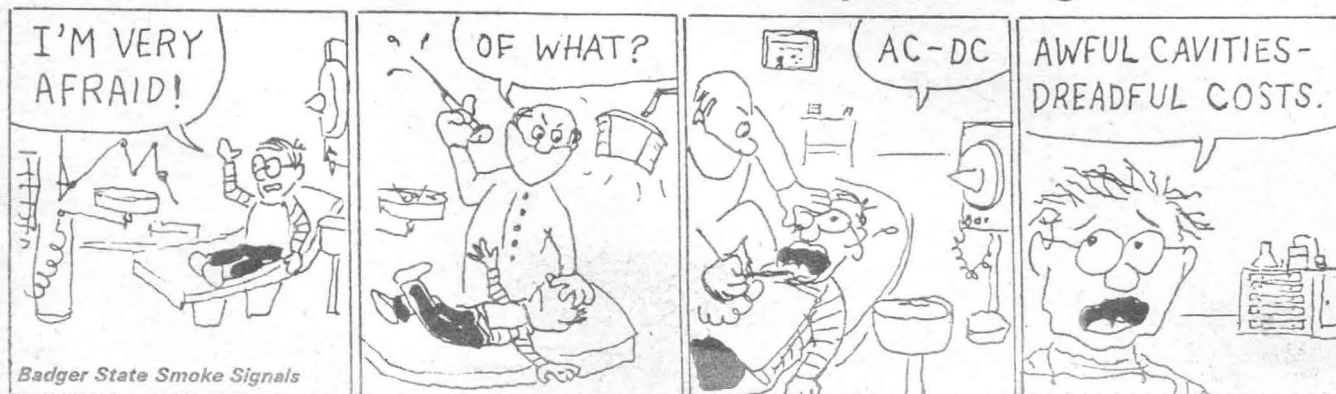
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ELMER

By Rich Regent, K9GDF



Badger State Smoke Signals

Swapfests and Other Social Events

SUNDAY, AUGUST 4, 1991. HAMFESTERS 57th annual hamfest and computer festival., Will County fairgrounds, Peotone, IL. 45 minutes from downtown Chicago. I-57 to Peotone Exit 327 (east).

SATURDAY, AUGUST 10, 1991. Rhinelander Swapfest, sponsored by the Northwoods ARC, ARES, Tomahawk Repeater Association and the Rhinelander Repeater Association. Held at the Sugar Camp Town Hall on Highway 17, 12 miles north of Rhinelander. License exams given starting at 8:30 am. Auction at 1:00 by Col. Greg Garner, WA9W. For information contact Bob Berger, WC90, 307 Lois St., Rhinelander, 54501. (715) 369-3267. (Watch for ad in next months BSSS.)

SUNDAY, AUGUST 11, 1991. Cedar Rapids, IA. Sponsored by the Cedar Valley ARC. Teamsters Hall, 5000 J Street SW, Cedar Rapids, IA. For information, contact Mike Golden, NOBJK, (319) 395-1473.

AUGUST 23-25, 1991. 1991 ARRL NATIONAL CONVENTION AND HAMFEST. Saginaw, Michigan. Contact: 1991 National ARRL Convention, P.O. Box 1783, Saginaw, Michigan.

SUNDAY, SEPTEMBER 8, 1991. BARS Hamfest and Computer Fair, Joliet, IL. Contact Bolingbrook

Amateur Radio Society, P.O. Box 1009, Bolingbrook, IL 60440. (708) 759-7005.

SEPTEMBER 21-22, 1991. PEORIA SUPERFEST. Exposition Gardens, Peoria, IL. Contact: Peoria Area Amateur Radio Club, P.O. Box 3508, Peoria, IL 61612-3508. (see ad elsewhere this issue for more details.)

SEPTEMBER 21-22, 1991. RADIO EXPO at Lake County Fairgrounds, Grayslake, IL. Contact CFMC P.O. Box 1532, Evanston, IL 60204.

SATURDAY, OCTOBER 5, 1991. Fallfest '91 sponsored by the Green Bay Mike & Key Club, at the Green Bay Community Center, 1637 Dousman St. Amateur License exams administered between 9:00 am and 12:00 noon. For further information contact: Green Bay Mike & Key Club, P.O. Box 12631, Green Bay, WI 54307. (414) 432-3491.

SUNDAY, OCTOBER 13, 1991. KMRA Swapfest, Waukesha, WI. Contact: KMRA Swapfest, P.O. Box 276, Waukesha, WI 53187-0276

SUNDAY, NOVEMBER 3, 1991. The FOXCITIES HAMFEST 91, will be held at the Starlite Club on Hwy. 55 North of Kaukauna. For information contact Don Baker, NB9J, 621 W. 7th St., Kaukauna, WI. 54130. (414) 766-3886.

SATURDAY, JANUARY 11, 1992. Midwinter Swapfest, sponsored by the West Allis RAC, at Waukesha Exposition Center, Waukesha, WI. For more information see the ad on the last page.

SUNDAY, FEBRUARY 8, 1992. Midwinter Madness Hobby Electronics Show, Blain Minn. Robbinsdale ARC, P.O. Box 22613, Robbinsdale, MN 55422.

As a service to our readers, this section of

Badger State Smoke Signals is available without charge to list your upcoming Swapfest, Hamfest, dinner, picnic, party or other event of interest to Radio Amateurs in Wisconsin and nearby areas. Send information on your event to Kenneth A. Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901. In addition, space is available at attractive rates on our advertising pages. For information on rates and requirements for our advertising pages, please contact K9ZZ or K9EN.

Club Meetings

Do to space limitations we cannot always carry the full listing of Wisconsin and area club meetings. Please save the following listings for your future reference. We hope to have the full listing at least three times a year, and will carry any changes or additions between full listings.

BADGER AMATEUR RADIO SOCIETY (W9YT - U. W. - MADISON)

Monthly while school in session - 2nd Wed. - 7:30 p.m. - B-314, Electrical Engineering Bldg.

CENTRAL WISCONSIN RADIO AMATEURS, LTD. (STEVENS POINT)

Second Wed..

EAU CLAIRE AMATEUR RADIO CLUB

2nd Tue. - 7:30 p.m. - Parks and Recreation Bldg., Oxford and 1st Streets, Eau Claire. Hams, guests welcome. Travelers welcome on wide area club repeater K9UXP, 146.31/91.

FOUR LAKES AMATEUR RADIO CLUB (MADISON WI)

First and third Tues. - 7:30 p.m. - Red Cross Bldg., 4860 Sheboygan Ave., room "C" downstairs. It is the next building west of the Hill Farms State Office building. The meetings start promptly at 7:30 pm.

FOX CITIES AMATEUR RADIO CLUB

Third Mon. - 7:00 p.m. - Roosevelt Jr. High School, 318 E. Brewster St., Appleton. Info: (414) 766-3886.

GREATER MILWAUKEE DX ASSOCIATION

Fourth Mon. of the month at 7:30 p.m. Contact Jerry Scherckenbach, N9AW, at (414) 481-8831 for meeting location.

GREEN BAY MIKE AND KEY CLUB

Second Thur. - Red Cross Bldg., corner Danz and Deckner, Green Bay.

GREEN FOX AMATEUR RADIO CLUB

Third Mon. - 7:30 p.m. - Green Lake Town Hall, int. of county hwy. K and N.

KETTLE MORaine RADIO AMATEURS

Second Fri., 7:30 p.m. at the Waukesha County Technical College, Campus Science Building, Room 102. Talk-in on the N9KS 147.39 repeater.

LAKESHORE RPTR. ASSN.

Last Tue., Jan., Apr., Jul., & Oct., 7:30 p.m. Red Cross Bldg., 4521 Taylor Ave., Racine, WI.

Badger State Smoke Signals

Officers and Staff

Chairman: Kenneth A. Ebner, K9EN, 822 Wauona Trail, Portage WI 53901. Telephone (608) 742-3560.

Editor: Jim Romelfanger, 412½ Ash Street, Baraboo, WI 53913. No telephone.

Treasurer: Jim Decker, WB9UQT, P.O. Box 337, Baraboo, WI 53913-0337.

Subscriptions

1 Year	(12 issues)	\$9.75
2 Years	(24 issues)	\$18.00
3 Years	(36 issues)	\$26.00

Special club package reduced rates are available. For information, contact Ken Ebner, K9EN.

Where to Send It

Address changes and corrections should be sent to Ken Ebner, K9EN, address above.

Editorial material, photographs, feature articles, display ads, and exchange papers should be sent to Jim Romelfanger, K9ZZ, address above.

Inquiries about advertising should be directed to Ken Ebner, K9EN, address above.

Subscriptions should be sent, with check or money order, to Jim Decker, WB9UQT, address above.

When to Send It

The closing date for each issue is the first of the month for the next month's issue. (For example, the closing date for the May issue is April 1.) The only exception is for participating clubs. Participating clubs are requested to send their material no later than 7 days after the club's meeting. (For example, if your club meets on the 4th of the month, the material should be sent no later than the 11th of the month.) This material is to be sent to Jim Romelfanger, K9ZZ.

Conditions for Reprinting Material from BSSS

Permission is hereby granted to reprint articles from *Badger State Smoke Signals*, providing credit is given to the original author, publication in which the article first appeared, and to *Badger State Smoke Signals*. This credit is mandatory, and no material may be reprinted unless it is given. This newspaper is mailed from Portage, WI 53901. This newspaper is produced for Radio Amateurs by Radio Amateurs. It is all volunteer and non-profit.

Editorial Disclaimer

The opinions expressed in editorials, guest editorials, columns, articles, and letters from readers are the opinions of the authors only, and do not, unless otherwise stated, express or imply endorsement by *Badger State Smoke Signals*, or by any other organization.

MADISON AREA REPEATER ASSN

The meeting schedule for 1991 is as follows:
Sept. 9 and Nov. 11.

MANITOWOC COUNTY RADIO AMATEURS

Directors Meeting: First Wed.
General meeting: Second Wed.

Both meetings held at 7:30 p.m. in the basement, Manitowoc City Hall, 817 Franklin St., Manitowoc.

MENOMONEE FALLS AMATEUR RADIO CLUB

Last Tue. - Doors open 7:30 p.m., meeting begins 8:00 p.m. - Security Savings and Loan, Menomonee Falls. Amateurs and guests welcome.

MILWAUKEE RADIO AMATEURS CLUB

Fourth Thur. - Room #280 Wauwatosa East High School, located at 74th and Milwaukee Ave. in Wauwatosa. No meetings in July, August and December.) Meetings begin at 7:00 pm.

NORTHERN WISCONSIN RADIO CLUB

4th Tue. - 7:30 p.m., Sept. through April. Peppermill Restaurant, Thunderbird Mall North, Menomonie, WI. Guests welcome.

NORTHWOODS ARC (RHINELANDER WI)

Third Tue.. Doors open at 7:00 p.m. Meeting at 7:30 p.m. South Park School, Rhineland, WI. Talk-in on 146.93/.34. All interested visitors to the Northwoods are welcomed.

OZAUKEE RADIO CLUB

Second Wed. - 7:30 p.m. - Saukville Community Center.

QCWA - WISCONSIN CHAPTER #55

Contact Robert Shady, KB9XR, Treasurer, 905 E. Doty Place, Milwaukee, WI, 53207. For information about meeting dates or joining QCWA Chapter #55. The Wisconsin Chapter holds Spring and Fall dinner meetings.

QCWA - SOUTHEAST WISCONSIN CHAPTER #162

Meets third Mon. monthly, 7:30 p.m., Around the Clock Restaurant, 3012 Rapids Drive, Racine.

RACINE MEGACYCLE CLUB

Second Mon., 7:30 p.m., Red Cross Bldg., 4521 Taylor Ave., Racine, WI

RIVERLAND AMATEUR RADIO CLUB

First Tue. - 7:30 p.m. - Onalaska Community Center, Onalaska WI.

ROCK RIVER RADIO CLUB

Monthly - first Tue. - 7:00 p.m. at Dodge County Sheriff's Department, 141 N. Main, Juneau, WI.

ARES Net: 146.04/146.64 Mon.s at 7:30 p.m. Sat.s on 7277 KHz at 10:30 a.m.

SHEBOYGAN COUNTY AMATEUR RADIO CLUB

Second Tue. - 7:00 p.m. - Sheboygan Red Cross/Boy Scout Bldg., 2032 Erie Ave.

SOUTH MILWAUKEE AMATEUR RADIO CLUB

First Wed. - Legion Post 434, Shepard Ave., Oak Creek WI. Auctions in March and October.

TAYLOR COUNTY AREA AMATEUR RADIO CLUB (TCAARC) MEDFORD

Usually the 2nd Thur. of the month at 7:00 PM sharp. Usual location: emergency government

meeting room, basement of Sheriff's Annex to Taylor County Courthouse, 2nd and Ogden Sts., Medford, WI. Talk-in on 147.75/15 or 145.27(-600) repeaters. Amateurs & guests are welcome. ARS Net, Wed. nights at 8:30 PM on 147.75/15. For info contact: Rolland Walty, W9LEE, W4117 Hwy. 102, Westboro, WI 54490. (715) 427-3492

TRI-COUNTY AMATEUR RADIO CLUB

Sun. of each month. Meetings are held at 7:00 p.m., at the Trinity Lutheran Church, 314 Barrie, Fort Atkinson, WI.

WASHINGTON COUNTY AMATEUR RADIO CLUB

Tue.: ARES/RACES - 7:30 p.m., club meeting - 8:00 p.m., Town of Polk Town Hall, Hwy. 60 and Scenic Dr. Net on 146.13/73 every Mon. 7:30 p.m.

WATERTOWN AMATEUR RADIO CLUB

First Thur. of the month at 7:00 p.m., The Watertown Public Library, 100 S. Water St., Watertown, WI.

WAUPACA AMATEUR RADIO CLUB

First Sat. in March, June, September and December, at 9:30 a.m. at the Waupaca Fire Station in downtown Waupaca.

"CQ First Tue." - A social gathering and dutch treat luncheon at the King's Table in King, WI, on Highway QQ just south of highways 10 and 54 on the west side of Waupaca.

WEST ALLIS RADIO AMATEUR CLUB

Second Tue. - 8:00 p.m. - St. Peters Episcopal Church, 7929 Lincoln Ave. Entrance is at rear of building on alley.

WISCONSIN ASSOCIATION OF REPEATERS

Meetings are held Quarterly, with time and location to be announced. Repeater licensees, trustees, and sponsors are urged to attend W.A.R. meetings. All interested parties are welcome, as well.

WISCONSIN VALLEY RADIO ASSOCIATION (WAUSAU)

First Tue. - 7:30 p.m. - Location varies; info on 146.04/64, Wausau.

YELLOW THUNDER AMATEUR RADIO CLUB (BARABOO)

Days rotate: Scheduled meeting dates:
All meeting at the Baraboo Civic Center, Baraboo, WI. Meetings start 7:30 p.m.

Let Badger State Smoke Signals know your club's meeting dates, and we will let our readers know of your meetings and activities. There may be Amateurs in your area interested in joining your club, or members of other clubs interested in making an interclub visit.

=====

Flying an airliner is getting progressively more and more complicated. In fact, modern airliners are nearly all computer controlled now, with redundant systems galore. In fact, most airliners only have two persons in the cockpit - the pilot, and a co-pilot. If things keep progressing toward total automation as they have so far, in 10 years there will still only be two in the cockpit - but then it will be a man and a dog.

The man's job will be to feed the dog. The dog's job will be to bite the man if he touches anything!

The Test Point

Amateur Radio examinations scheduled in and around Wisconsin

The following are known locations where Amateur Radio license examinations are scheduled in the Badger State area.

August 10, 1991	Rhineland, WI Northwoods ARC swapfest
August 10, 1991	Appleton, WI
September 4, 1991	Milwaukee, WI (MRAC)
September 7, 1991	Dubuque, IA
September 28, 1991	Milwaukee, WI (MRAC)
October 2, 1991	Milwaukee, WI (MRAC)
October 5, 1991	Green Bay, WI Green Bay Mike & Key swapfest
October 12, 1991	Eau Claire, WI
October 13, 1991	Waukesha (BE) KMRA Swapfest
October 26, 1991	Milwaukee, WI (MRAC)
November 2, 1991	Menomonie, WI
November 3, 1991	Kaukauna, WI Foxcities hamfest
November 6, 1991	Milwaukee, WI (MRAC)
November 11, 1991	Onalaska, WI
November 30, 1991	Milwaukee, WI (MRAC)
December 7, 1991	Stevens Point, WI
December 4, 1991	Milwaukee, WI (MRAC)
December 7, 1991	Dubuque, IA
March 28, 1992	Menomonie, WI
November 7, 1992	Menomonie, WI
Monthly, First Sat.	Racine, WI (except January, July & August)
Monthly, Last Sat.	Tomahawk, WI (January thru October only)
Monthly, Third Sat.	Loves Park, IL
Minnesota tests listed at end of column	

Many of the larger Swapfests/Hamfests offer exam sessions. If not shown above contact the sponsoring club in the Swapfest column on page 2.

GENERAL RULES

FOR MOST EXAMINATIONS:

Be sure to check with sponsors in the event there are changes and/or errors in the dates or information given.

Most examinations require filing an FCC Form 610 and advance registration at least 30 days before the exam date. (Some VECs permit walk-ins. Check with sponsor.)

To register, you must first secure a copy of the current FCC Form 610 and fill it out completely (AND CORRECTLY). Get your form from an FCC Field Office, the ARRL or Badger State Smoke Signals. Send a 25¢ SASE if you request one from the ARRL or BSSS. In most cases, forms can also be obtained from the sponsoring group.

ARRL/VEC examinations require a check for \$5.25 payable to "ARRL/VEC".

The FCC now requires applicants to show their original Amateur license to the VEC. A copy of your license must be attached to your FCC form 610. You will also be required to have a photo ID, or other acceptable identification.

(continued on page 23)

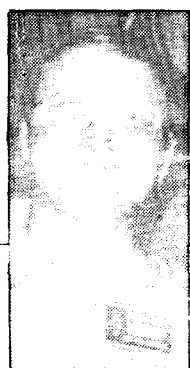
Wisconsin Nets Association Ltd.

Bob Towns, N9IAI, Secretary • 413 Pine Street • Waupaca, WI 54981

Wisconsin Nets

Net	WNA	Freq.	UTC	CDT	Mgr.
BWN	Yes	3984	1100	0600	W9AYK
BEN	Yes	3985	1700	1200	WB9ESM
WSBN	Yes	3985	2230	1730	K9UTQ
WNN	Yes	3723	2300	1800	KA9FVX
WSSN	Yes	3645	2330	1830	N9BDL
WIN/E	Yes	3662	0000	1900	WB9ICH
WIN/L	Yes	3662	0300	2200	W9NGP
NWTN	Yes	34/94	2330	1830	NS9Q
		(Rhineland area)			
6:30					
Net	No	01/61	2330	1830	KA9OMC
Gr. Bay	No	72/12	0145	2045	WB9NRK
		(Green Bay area)			
ARES	No	4.65/5.25	0100	2000	
		(South East/South Central Wisconsin)			
RACES	No	3993.5	1715	1215	WC9AAG
		(USB Tuesday and Thursday)			
RACES	No	3993.5	1300	0800	WA9OAY
		(LSB Sunday)			

Section Manager's Notes



Richard R. Regent, K9GDF
5003 South 26th Street
Milwaukee, WI 53221

June, 1991

Everyone is welcome to the Wisconsin Nets Association Picnic and Fall Meeting, September 7th, at Ochsner Park in Baraboo; zoo and playground for kids, camping in vicinity by reservation.

Send monthly net reports and individual traffic counts to K9KSA, Section Traffic Manager; Don could also use more net control stations.

Free severe weather procedures and message formats are available from WB9SMM, Section Emergency Coordinator.

Southeast Wisconsin ARES net meets Monday evenings at 8 p.m. on 145.25 MHz.

WB9RQR directed ARRLS exercise, as part of summary, indicates solid copy contacts were heard between mobiles for distances less than 10 miles.

Nominated as 1991 candidate by Delco Electronics, N9DIJ of Milwaukee was awarded Certificate of Leadership by YWCA.

Get *Badger State Smoke Signals* subscription information from K9ZZ.

N9AW has semi-automatic key collection, and is looking for more keys.

Net News and Gossip

Written and Edited by the Net Managers

Wisconsin Intrastate Net/Late (WIN/L)

Ed Rice, W9NGP, Net Manager
W126 Lang Road
Oconomowoc, WI 53066

A comparison of the totals for the first half of 1991 with the same period in 1990 shows a trend:

	1990	1991
QNI	1032	1143
QTC	365	315
QSP	227	209
QTR	2110	1577

If you check the percentage of the traffic cleared, you will find it to be 62% for 1990, and 66% for 1991. So, it appears we have more people checking in with less traffic offered and clearing a

larger percentage of it. That's good news and bad news, I guess.

If you have traffic left at 2200, bring it to the Late WIN. We can take it to the Weather Net or the daytime 9th Region Net.

N9BDL has taken over the Saturday nite NCS position, and proudly wears his new red sticker. We call him the Super Sticker Licker.

Recently, I read about certain foreign officials who are recording American hams so they can submit the recordings to the WARC-92 to support their claims that the ham bands can be re-allocated to other, more serious services. You can bet they are recording phone QSOs, not CW.

Even if they had a CW operator to translate the QSO, it is unlikely they would find the kind of silly drivel that is heard on the phone bands. Even if the sample they recorded happened to be a practice message about Sir Slim and his camel, Humphrey, they would find it to be in good message form with proper preamble and address, and delivered with skill. I think they would appreciate its purpose.

73, Ed

From the

Public Information Coordinator

Jim Romelfanger, K9ZZ
412½ Ash Street
Baraboo, WI 53913

I don't have much room, nor do I have much to tell you in this short treatise. But I do have a couple of items to pass along.

First, some time ago the ARRL changed the titles of the public information personnel's field appointments. The Section level appointment, which was Public Information Officer, is now Public Information Coordinator. Those working at promoting media coverage of Amateur Radio in each ARRL Section under the PIC were called Public Infor-

Volunteer examiner Fox Cities ARC, Green Bay Area Radio Club, and Marquette, to coordinate testing help at each other's hamfests.

West Allis RAC is having member article-writing contest, with prizes.

N9GOZ heard regularly on Milwaukee FM station giving stock market reports as part of his

mation Assistants; they now have the title of Public Information Officer.

The next item is the new *Public Relations Handbook*, published, of course, by the American Radio League. It's an excellent book, full of information about how to get media coverage of Ham Radio. It contains do's and don'ts, lots of very practical advice, and plenty of sample news releases.

Finally, our Wisconsin Section needs Public Information Officers! There isn't a huge amount of work involved (unless you want to go an extra mile or two!). For information about appointment as a PIC, write to our Section Manager: Richard Regent, K9GDF, 5003 S. 26th St., Milwaukee, WI 53221. Rich also will make the appointment, if you should decide you want to accept it.

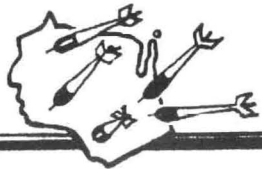
The 1991 WNA Picnic will be held at Ochsner Park on 8th Avenue in Baraboo on Saturday, September 7. Please see page 21 for full information.

work.

Milwaukee Radio Amateurs' Club exams are on September 4th and 28th; more info from W9JK or KE9JJ.

Four Lakes ARC will sponsor auction on September 17th.

Thought of the month: *All inanimate objects can move just enough to get in your way.*



HERE and THERE

WHERE WERE YOU ON DEC. 7, 1941? If you were a licensed amateur then and have memories of the days before and after that fateful date, *QST* senior editor Jim Cain, K1TN, would like to hear from you, in conjunction with a story being prepared by phone (203-666-1541) or mail (225 Main St., Newington, CT 06111) as soon as possible.

- *The ARRL Letter*, 6/27/91

(Your BSSS editor remembers nothing about Dec. 7, 1941, since he was less than 24 hours old on that day.)

FCC-ISSUED CALL SIGN UPDATE: The following is a list of the FCC's most recently issued call signs (as of June, 1991).

District	Group A Extra	Group B Advanced	Group C Tech/Gen	Group D Novice
0	AA0EV	KF0SC	N0OCF	KB0JFJ
1	WS1X	KD1BQ	N1JGE	KA1YYC
2	AA2ET	KF2CD	N2MQY	KB2NAI
3	WN3U	KD3XH	N3JRF	KA3ZCI
4	AC4GC	KO4CL	**	KD4GBU
5	AA5YO	KI5QR	N5TXE	KB5PWB
6	AB6DC	KM6BX	**	KC6VVV
7	AA7IS	KG7PV	N7SBC	KB7NSV
8	AA8DZ	KF8NV	N8OSW	KB8MQY
9	AA9AX	KF9DT	N9LPE	KB9GYD
Alaska	**	AL7NE	NL7XO	WL7CCL
PR	**	KP4SB	**	WP4KBV

** All call signs in this group have been issued in this area.

- *The ARRL Letter*, 6/27/91

NEW UHF REPEATER IN MADISON: A new UHF repeater, N9KAN/R, in Madison is operating on an output frequency of 443.400 MHz. The machine is a 90-watt Motorola repeater, located on a 370-foot tower on the west side of Madison. It is carrier access, and has wide coverage.

- Greg Zier, KA9VDU, via WD9ESU packet BBS



CONGRATULATIONS TO BARB (N9JAR) AND STEVE (WB9YSD) POLISHINSKI, of Sun Prairie, on their first-born, Kurtis Steven Polishinski. He was born on May 30. Steve stays on the leading edge of technology. It appears that their new son was is destined to be much like his father; he was nearly on the "leading edge" of the delivering doctor - the doctor arrived *just* before Kurtis did.

RADIO SHACK STORES TO SELL LEAGUE BOOK: Radio Shack stores will shortly begin selling the American Radio Relay League's new beginner's book, *Now You're Talking! Discover the World of Ham Radio*. The book will be offered in stores throughout the country, as well as in the company's catalog. As found on Radio Shack shelves, *Now You're Talking!* will be identical to the regular ARRL edition, with two exceptions: it will contain no commercial advertising, and its front cover will sport the Radio Shack logo and catalog number.

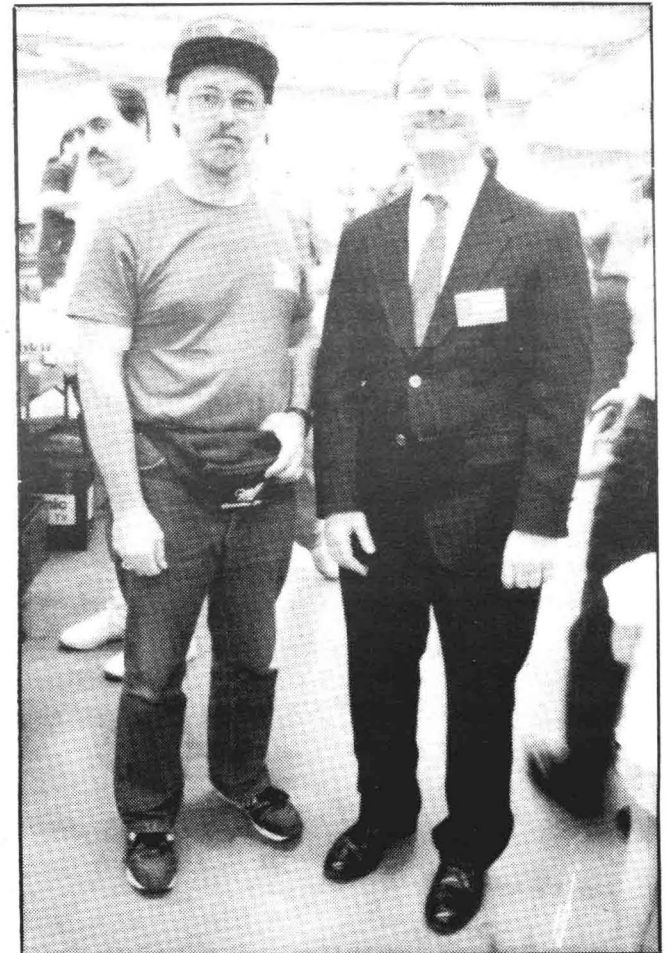
The Radio Shack version also includes an invitation to ARRL membership, and an FCC form 610.

- *The ARRL Letter*, 6/27/91

OOPS! BANG! BALLOON LAUNCH SCRUBBED: The Amateur Radio balloon launch from Hillsboro, WI, on July 6, 1991, met "Murphy" head-on. The initial 110 cu. ft. balloon broke free prior to the scheduled launch while the ground crew was "topping off" the balloon with helium gas. The radio (2-meter repeater and other transmitters) was recovered, and a second, slightly smaller balloon was made ready after a supply of helium was brought to the launch site. Unfortunately, the second balloon burst during topping off, and the mission was scrubbed.

The group (headed by Joe Mayenschein, WB9-SBD) indicated that another attempt will be made later this summer. They will probably redesign the radio package. Watch your local packet radio BBS for updates and launch announcements.

(BSSS editor's note: Packet is probably the only way to get timely information about launch dates, since we receive no notice of these launches at all for publication here in BSSS. When we do discover a launch date, it is on packet, and only a day or two before launch. We are sorry we can't provide our readers with launch info, but it is never submitted to



In this photo are Tom Wensch, N9HR, Oconomowoc (left), and ARRL Wisconsin Section Manager Rich Regent, K9GDF, Milwaukee; they paused for the picture at the Madison Swapfest in April.

us.)

- Steve Loeffler, WB9ZRE, via WD9ESU packet BBS

CALIFORNIA PIRATE, QRT: The FCC's Los Angeles Office shut down an unlicensed FM radio station operating on 89.7 MHz in Simi Valley, California. According to an FCC news release, radio operator Derek Lloyd Underhill was fined \$1000 for unlicensed operation. The pirate station, identified as "KDLU," a call sign not currently held by any licensed station, was causing interference to a licensed radio station operating on a nearby frequency.

- Excerpted from *The ARRL Letter*, July 11, 1991, published by the American Radio Relay League □

Badger State Smoke Signals

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9108

A Day in the Field

By Richard R. Regent, K9GDF
5003 South 26th Street, Milwaukee, WI 53221

Wind-swirled rain sprinkled the logs of some Wisconsin amateurs operating in ARRL's Field Day this year. The winning strategy was simply to maximize the number of contacts and bonus points, and keep dry.

By the time Field Day started, many clubs had already copied the special ARRL FD bulletin to capture the W1AW message 100 bonus points.

Class A contesters with two or more transmitters made good use of the 10-meter SSB Novice band to add hundreds of additional Novice contacts, without changing their basic entry classification.

The packet radio station, like the Novice station, did not add to the number of entry class transmitters, so there was no need to shut down a main station from operating while the Novice and packet stations were on the air making contacts or collecting bonus points. Packeteers were able to relay ten bonus messages, send their message origination and make a contact, for 300 bonus points, and then continue to make QSO points.

Some clubs got their 100 bonus point satellite QSO, again without increasing the transmitter count. Bicycle, wind, or sunshine natural power was used by a few club members to make a minimum of five QSOs for another 100 bonus points. To avoid changing the entry class, groups took one main station off while the natural power station quickly made several two-meter contacts.

Club officials around Wisconsin greeted visitors, explained the Field Day purpose, and gave tours of operating stations. Local newspaper reporters stopped by to snap a picture and write up a story, helping the clubs get their public relations bonus points. Some clubs tried the bonus options of operating in a public place, such as a shopping center or public park, and handing out pamphlets or information about Amateur Radio.

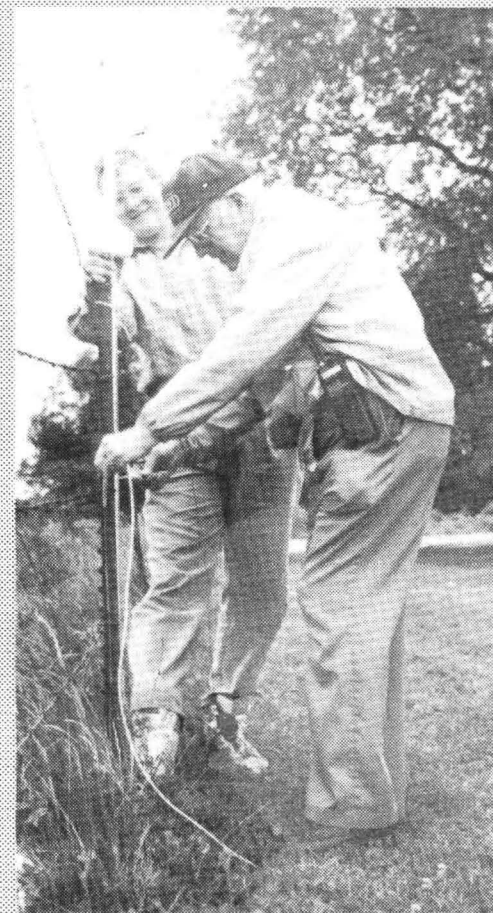
Nine hundred bonus points were possible. An occasional Novice rally, packet capability, computer logging, and lack of mosquitoes also boosted many club scores.

From Porta-Potties to extension cords, and many of the conveniences of home, Wisconsin amateurs were roughing it in the rain-soaked fields. Occasionally, a few discouraging words were heard from tents as emergency power generators sputtered, keyer and computer memories were lost, and lights dimmed.

Thanks to all who participated in Field Day 1991. The message originations in the column at right reached their destination of the Section Manager. □

Field Day Setup

For Field Day, equipment, power, operators, and antennas are the basic essentials. Here, Harry Westlund, K9EHJ, Baraboo (right), and Joey Sweeney, KB9ERR, Portage, string a 10-meter dipole at the Yellow Thunder ARC FD site. More photos of various club and group Field Day operations from around Wisconsin are on the next few pages of this issue of Badger State Smoke Signals. BSSS thanks those who submitted photos of their Field Day crews in action. □



Section Manager Field Day Bonus Messages

Group	Call	Location	Operators/ ARES Members
Calumet ARES	KN9P	Ledge Park	9/8
Central Wis. Radio Amateurs	W9NN	Plover	12/12
Four Lakes ARC	W9JZ	Middleton	30/7
Kettle Moraine Radio Amateurs	N9KS	Hill Crest Park near Waukesha	40/20
Manitowoc County RA	W9DK	Silver Creek Park	16/12
Marshfield ARC	WA9K	Praschok Wayside	21/10
Mississippi Valley ARA	KR9A	Highway 35 south of Coleman	8/1
Northwoods Ham Club	NS9Q	Rhineland Nicolet College	20/8
Ozaukee RC	W9LO	Lazy Days Campsite	12/7
Rock River Radio Club	W9BCV	Derge County Park	25/14
Washington County ARC	WA9WYI	St Lawrence	7/0
Watertown ARC	N9HR	Richwood	10/10
Waupaca ARC	W9GHY	Iola Old Car Show Grounds	8/6
Wisconsin Rapids Broadcast Club	W9DOA	Mid State Tech College	25/20
W/K ARC	N9AW	Oak Creek Legion Post	12/0
Individuals N0ILS and N0IOS	N0ILS	Luck	2/0

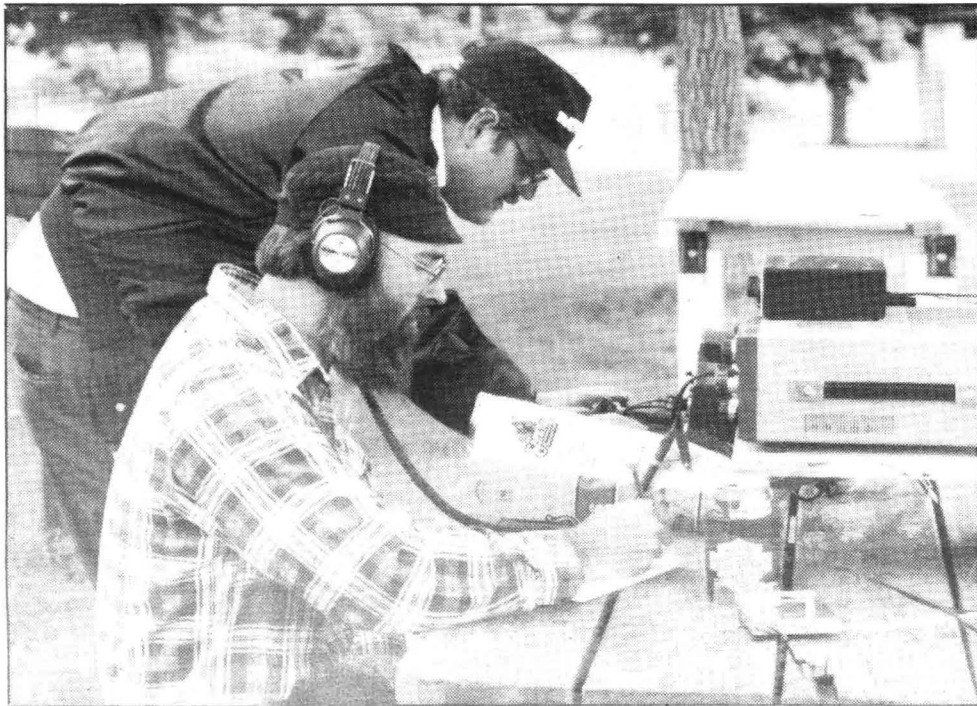
Field Day - Circa 1961



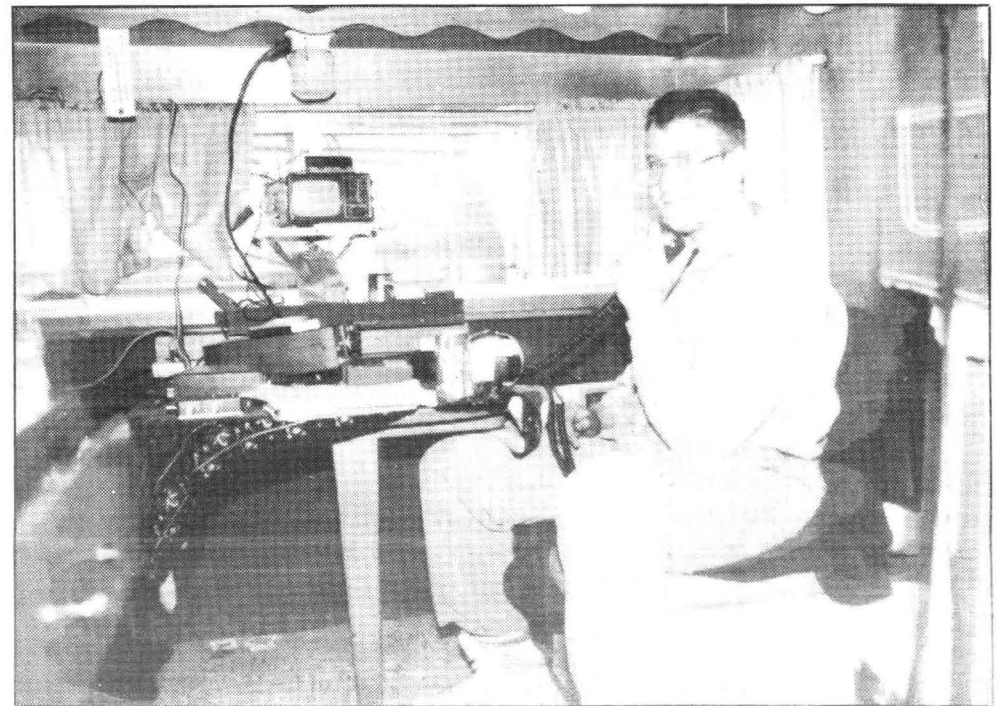
Field Day, around 1961, involved equipment that was best described as "unportable." This photo was taken by K9PKQ (now K9ZZ) at a non-club Field Day outing at Owen Park, in western Columbia County. The operator is Al Skinner (then WA9CUP, now WB9YWI), and he is working six meter AM with a homebrew rig built by K9GSC (now K9EN). □

Field Day 1991 ■ Yellow Thunder Amateur Radio Club

WB9FDZ/9 • Class 3A • Owen Park, Columbia County, Wisconsin



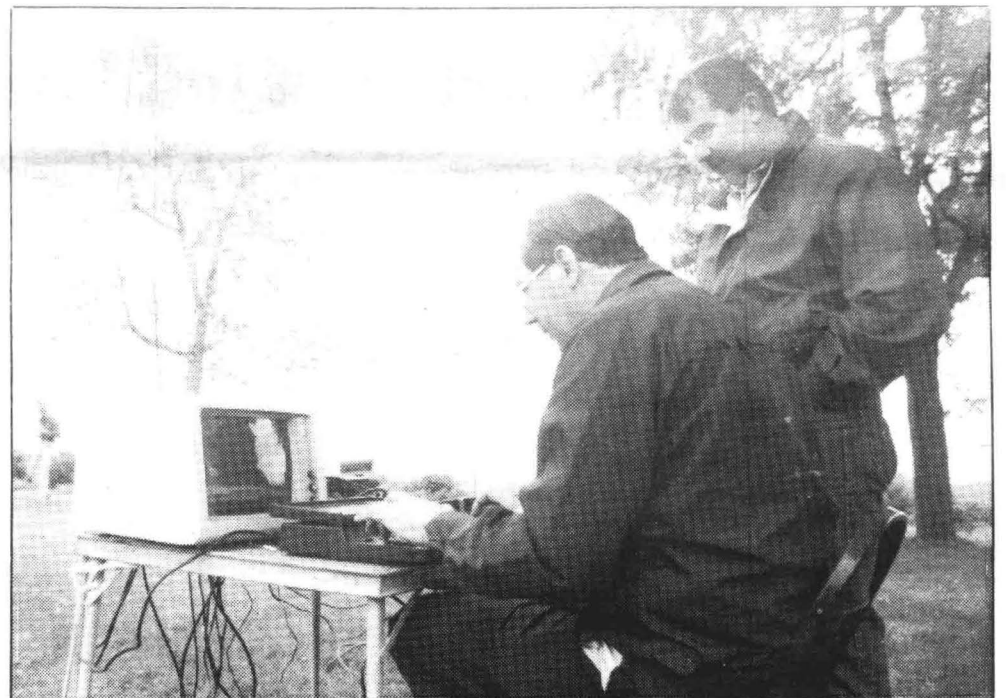
The YTARC operated Field Day 1991 from its usual lofty location: Owen Park, on top of a bluff in western Columbia County. On clear nights, Madison can be seen from there. In the photo above at left are two stations, being operated in a CW duet by Bob Sauvan, WT9Q, Sauk City (with beard), and Steve



Schwoegler, WB9RNL, Wisconsin Dells. In the photo at right is Joey Sweeney, KB9ERR, of Portage, who operated ten meters in a relatively comfortable location in a camper. YTARC's Field Day weather was cold and windy; the high temperature for the day was a very unbalmy 62 degrees.



Jim Decker, WB9UQT, gets his mug on this page twice! In the photo at left, Jim operates packet radio, as Bill Klinkner, N9KXX, Sauk City (wearing cap), and Jack Kirner, N9LKZ, of Prairie du Sac, look on. In the photo at right (taken before moving the station out of the cold wind into a tent), Jim demonstrates



packet radio for Tim Carlin (standing), Assistant Emergency Government Director of Columbia County. Tim stopped to learn first-hand about Amateur Radio and its potential for disaster and emergency communications; he hopes to integrate radio amateurs into the county's communications plan. □

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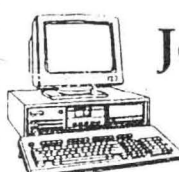
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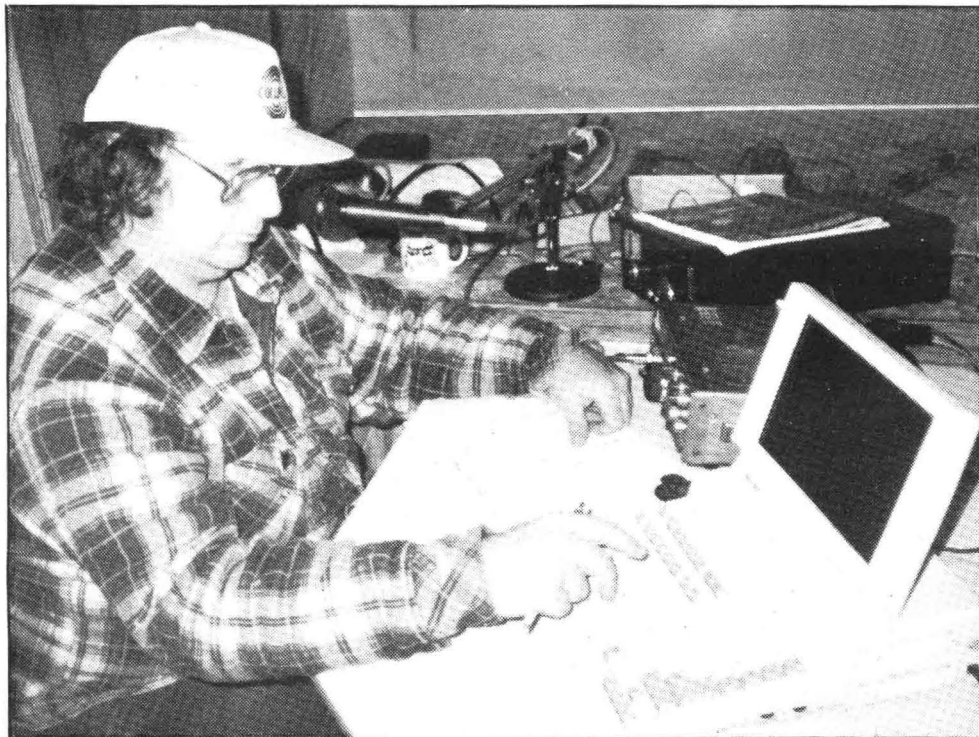
EVERYTHING PHOTOGRAPHIC

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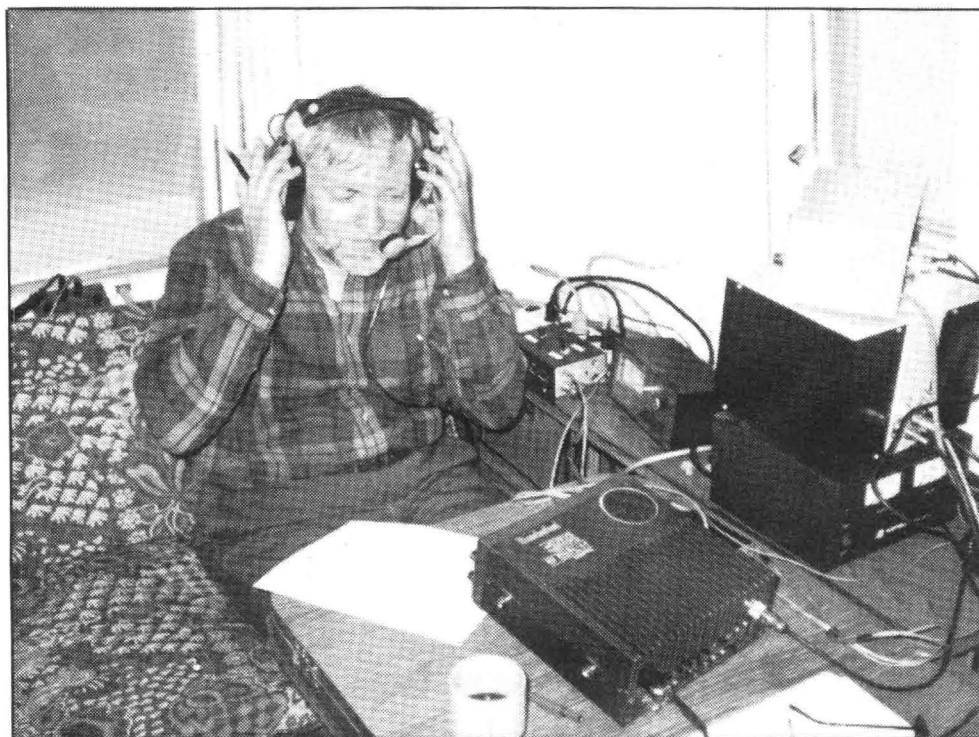
129 FOURTH ST.
BARABOO, WI 53913

Field Day 1991 ■ West Allis Radio Amateur Club

W9FK • Class 3A • Crystal Ridge Ski Hill, Franklin, Wisconsin



Mike Povlich, WB9HGS, is shown operating the 40-meter position during his stint on the air at W9FK.



Lynn Tamblin, K9KR, listens hard for the weak ones at the 20-meter position. Out of camera range was Tom Macon, K9BTQ, doing the duping on a computer.



Pete Mueller, N9JOO, WARAC Field Day Chairman, listens for potential contacts on 10 meters, while Ken Giesfeldt, KB9UAI, tunes.



Phil Gural, W9NAW, checks one of the generators. Phil operated six and two meters.

- Photos by Dave Knaus/WA9POV

Packet Pickins'....

• The submarine U.S.S. Requin (SS 481) is docked in Pittsburgh, Pa., on the Ohio River. It was commissioned April 28, 1945. The radio shack and original equipment are being restored and operated by the Breeze Shooters A.R.C.

Anyone wishing a contact with the submarine should listen on 28.490 MHz Saturdays and Sun-

days. The callsign used is W3XX. The QSL manager for all contacts is WB3LHD. Send an SASE to his 90-91 Callbook address.

If anyone you know was stationed on this sub, or if you have any info about it, send a message to WB3LHD @ NO3M, or write to WB3LHD.

- Ron, WB3LHD

• A movie worth renting is *High Frequency*.

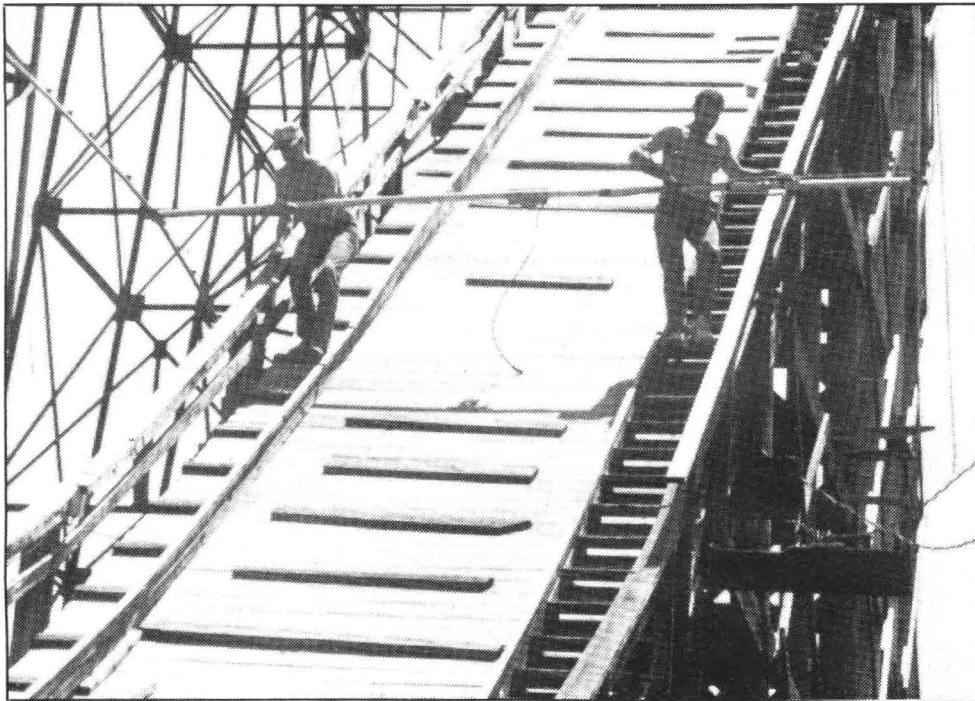
It's about a kid (WM2ATE), who gets caught in a conversation with a man operating a weather station. They accidentally hear a conversation which leads to DX suspense. The rigs look like a Yaesu Frog 7 and a pair of Drakes. An excellent movie for ham fanatics. Should be in the Younger Children section, but worth watching.

- John, KT0F

....gleaned from the WD9ESU packet BBS. □

Field Day 1991 ■ Four Lakes Amateur Radio Club

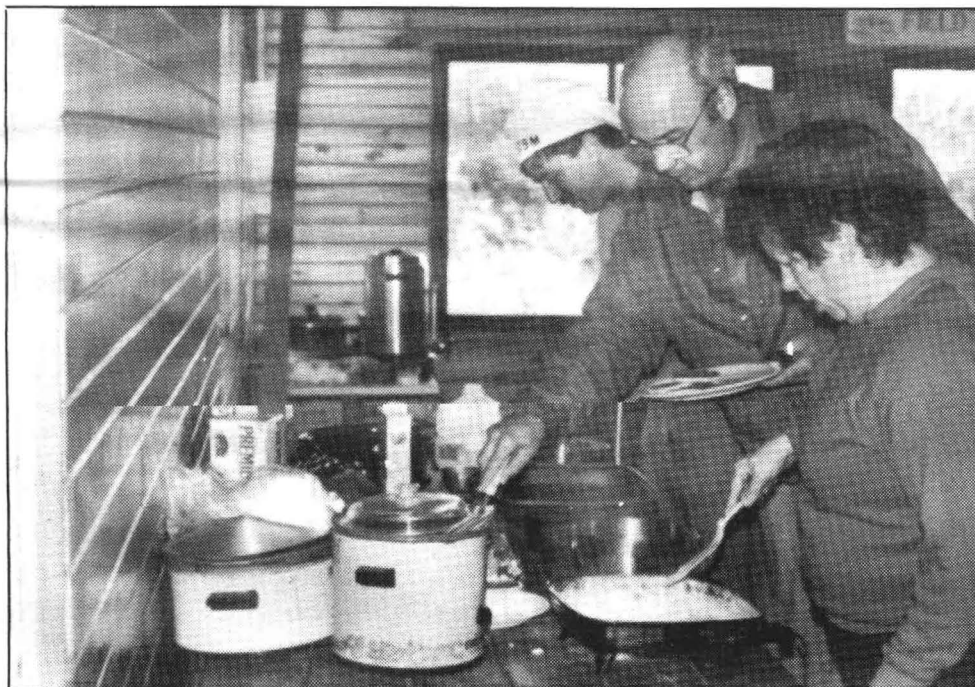
W9JZ • Blackhawk Hill Ski Area



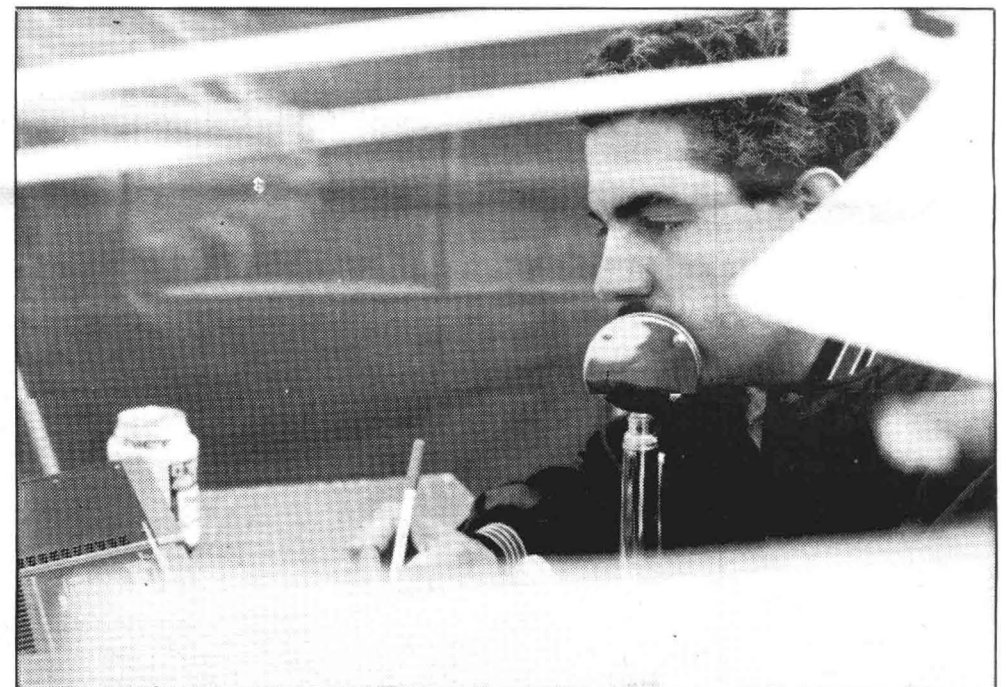
Ski jumps make excellent towers for Field Day antennas! Here, after Field Day operation, Dave Rece, NO9M, and Gary Turner, KC9LM, carry the fully-assembled 40-meter beam down the jump side of the tower.



Diane Aspinwall, KB9DSI, gets her first experience copying code off the air at the FLARC Novice station. All photos of the FLARC Field Day operation were taken by R. B. Aspinwall, KA9JPZ.



In the photo above, Chef Dave Rece, NO9M (rear), and his assistant, Sharon Hanold, KA9GPY, cook up some breakfast while Chuck Forster, WA9ACI, loads up a plate of cakes. Dave was presented with the chef's hat with his call on it to recognize his hard work preparing the meals for the FLARC Field Day crew.



(Some of the best cooks in the world are from Kentucky, right, Dave? - BSSS ed.) In the photo at right is Mike Sonn, KF9AF, operating 20 meters early in the contest on Saturday afternoon. More FLARC Field Day photos are on the next page. □

Editor's Notes

• If you have photos of your club or group taking part in Field Day, and you haven't sent them to BSSS for possible publication yet, don't despair: We plan to print more from other clubs in our September issue. The pictures we printed in this issue are all the pix we had received at our printing deadline. We can reproduce either color or black and white photos. We cannot work directly from transparencies ("slides"); we must have prints made

from them first - and that adds about ten extra days of delay. Please identify all subjects by full name and call sign, and provide your FD operating location and category. We thank the clubs and photographers who did send FD pix to us!

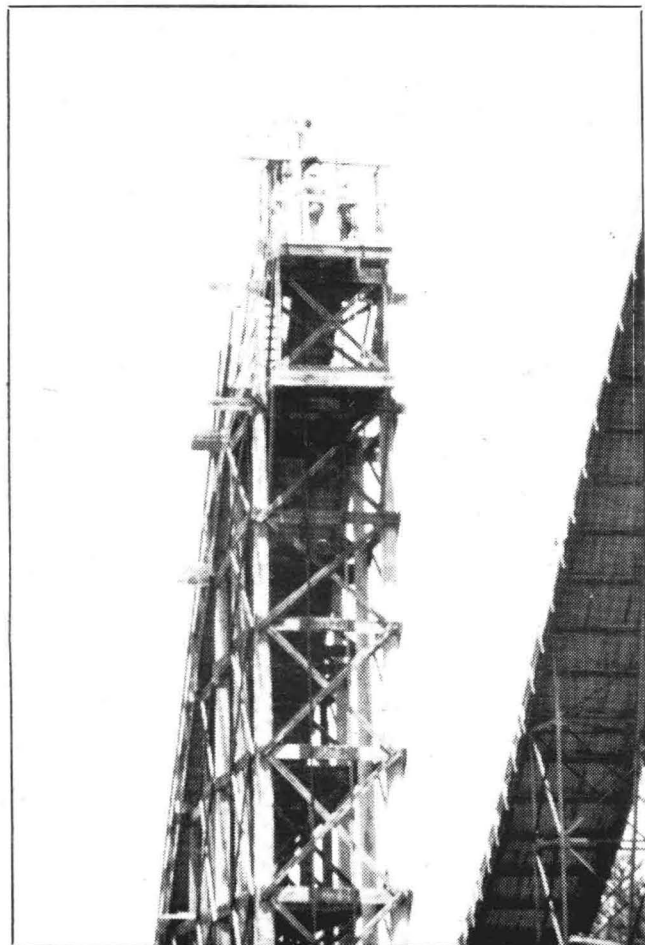
• Swapfest notices are to be sent to Ken Ebner, K9EN, 822 Wauona Trail, Portage, WI 53901. Ken sets up that portion of BSSS. Many of these notices are being sent to me, which results in possible loss of that material, or in added delay in its getting to the correct BSSS staffer (K9EN). Your cooperation will be appreciated. Examination schedules are also to be sent to K9EN.

• If you are not a BSSS subscriber or are not receiving BSSS as a member of a participating club, then it's a fairly safe bet that you received this issue as a free sample copy. We hope that you enjoy reading it, and that you will consider becoming a regular reader! A subscription form is on page 5 of every issue.

• Please do not inform for BSSS by packet radio. Some folks think this is a business. It is not, of course; none of us are paid a thing for our hard work every month. It's unfortunate those folks didn't bother to get the facts. The *truth* is that it's our (K9EN, WB9UQT, and myself) HOBBY. □

Field Day 1991 ■ Four Lakes Amateur Radio Club

Continued from previous page



In the photo above, the FLARC FD crew begins to dismantle the 40-meter beam on top of the 40-meter high ski jump. FLARC's 20-meter phone station, in the photo at right, had all the comforts



of home! FLARC extends its thanks to the good people at Blackhawk Ski Hill for allowing the club to use the Hill's fine facilities for this year's Field Day! - Photos by R.B. Aspinwall/KA9JPZ

1991 Circus Train Hams + 1



When the Great Circus Train pulled out of the Chicago and Northwestern Railway yard in Baraboo on July 9, it carried a precious cargo: the dozens of restored circus wagons from the Circus World Museum for the Great Circus Parade in Milwaukee on July 14. It also, as usual, carried a compliment of Milwaukee Amateur Radio Emergency Service members, who provide communications facilities, including mobile and cellular telephones, for CWM personnel and the news media. In the photo above are CWM staff member Dale Williams, Baraboo; Ron Armstrong, WB9WRW, Waukesha; Jim Goelden, KA9ZYW, Germantown; and Bill Fullhart, N9IBU; Jack McLeland, W9ATK; and Bill Kidd, NE9W, all of Milwaukee.

- K9ZZ photo

New Tech Class Has Major Initial Impact

New Tech is Overwhelming Success

Applications for the Technician license are up 1250% (yes, that's twelve hundred fifty) during May, compared to 1990. The total number of hams is now 517,000. And, most important, upgrades from both Novice and Tech to General Class are up 47% over this time last year! As we predicted at NARA, now that Morse is no longer being used as a filter to keep out the "undesirables," or a means of "separating the men from the boys," it is now being perceived as a fun thing to do... another area of ham radio that is physically and mentally challenging.

The VECs are reporting little or no problems with the new crop of amateurs. They all seem to want to emulate their peer group. I hope we continue to set a good example for them.

- Don Stoner, W6TNS, via CompuServe's HAMNET in *Westlink Report*, 7/12/91

Large Increase in new Technician Licensees in Wisconsin

The percentage of new Technician licensees in a recent list of new Radio Amateurs in Wisconsin appears to confirm W6TNS' remarks in the story above. Here are the new license classes, with numbers and percentages:

License Class	Number	Percentage
Extra	0	0
Advanced	1	.6
General	1	.6
Technician	105	65.2
Novice	54	33.5
Totals	161	99.9

Read "Sometimes, it's Amazing" on page 15. This editor does *not* share the concern expressed in that story about the new Techs' qualifications or competence; most will do just fine. (Remember the old adage: If all else fails, read the instructions?) Encourage and help new hams whenever you have the chance; when possible, do that on the telephone or in person. (We don't know what percentage of the new Techs are no-code licensees. And, the percentages above were rounded to the first decimal place.)

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The second regular meeting of the newly-formed Chapter 174 was held May 11th at the Captain's Restaurant in Wausau, WI. 23 members, wives, and guests were present for the happy hour before the noon luncheon. One member arrived after the luncheon before the meeting.

The meeting was called to order at 1310 hours by the President, Bob Baird, W9NN. The minutes of the last meeting were included with the notice for this meeting, so the Secretary, W9BCC, read the minutes of the meeting of the Board of Directors held April 11. W9GHY gave us the status of our treasury. We are solvent, with a balance of \$80.93.

Mike also reported our checking account with M&I First National Bank enjoys a free checking status. The reports were accepted as given.

We were honored having Travis Baird, W9-VQD, a member of the Board of Directors of QCWA, Inc., at our meeting. A question was asked about the status of Congressional Bill H.R. 73. Travis reported that he did not know its exact status. He did say that Harry Dannals, President of QCWA, Inc., cautioned individual members not to write letters as [being] from QCWA. One can write on an individual basis, but any reference to QCWA might endanger QCWA's status as a tax-exempt organi-

zation.

The President appointed a nominating committee to prepare a slate of candidates for election of officers and directors at our next annual meeting in September. It was decided to hold our next meeting in Wisconsin Rapids, WI, on September 14.

A member brought up the idea of having a goal for our chapter. When people ask what we do, what can we tell them? Perhaps a scholarship program in some manner or form? Maybe in conjunction with National OCWA? Let's think about something.

Frank L. Guth, W9BCC, OCWA #7850

Badger State Smoke Signals has several club package offers which provide special reduced rates for subscriptions. If your club would like complete information about these special, low rates, contact BSSS Chairman Ken Ebner, K9EN, 822 Wauona Tr., Portage, WI 53901, (608) 742-3560.

RHINELANDER SWAPFEST

EST

AUG 10, 1991

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I'M GOING TO THE RHINELANDER SWAPFEST AUG 10, 1991

Sponsored by the Northwoods Amateur Radio Club, ARES, Tomahawk Repeater Assoc., and Rhinelander Repeater Assoc.
Swapfest location will be at the Sugar Camp Town Hall - 12 miles north of Rhinelander

Admission will be \$1.00 at the door with children 12 and under free

free
Doors will be open to vendors at 7:00 with sales beginning at
8:00

ARRL testing will be available with registration at 8:30 and testing at 9:00

Concessions - Food and Beverage

Auction at 1:00 by Col. Greg Garner, WA9W

8' tables will be available for \$5.00 each. First come first serve, so reserve your tables early

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Amateur Radio Spectrum Protection Bill Introduced in Senate

Continued from front page

The Federal Communications Commission shall provide equivalent replacement spectrum to the Amateur Radio Service for any frequency reallocation after January 1, 1991."

The accompanying floor statement, printed in the *Congressional Record* on June 25, clarifies that the purpose of the legislation is to ensure that ham operators can continue to use all of the spectrum they now use. If the FCC proposes to put Amateur Radio allocations to some other use, the bill would require that amateur operations be transferred to equivalent replacement frequencies. By equivalent, this legislation ensures that the replacement bands be equal in both size and characteristics. The bill is designed to protect the existing spectrum allocations for all Amateur Radio services.

The State of the (Amateur) Spectrum

The Amateur Radio Spectrum Protection Act is a top priority for League members (and for all radio amateurs). As the floor statement points out to other Senators, the Amateur Radio Service has lost 107 MHz of the space it held as recently as 1982. Virtually all amateur allocations above 420 MHz are already shared with private-sector services. Further, on one-third of the amateur allocations below 30 GHz, we must accept interference from industrial, scientific and medical (ISM) devices, including consumer devices such as microwave ovens.

True, we're grateful for the use we can make of these frequencies, and we've found certain government operations, particularly those of military radar installations, to be good sharing partners. We're coping with the bands we have in 1991, but as we

Senate Committee on Commerce, Science and Transportation

Majority Members

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Albert Gore, Tennessee
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Bob Packwood, Oregon
Larry Pressler, South Dakota
Ted Stevens, Alaska
Robert W. Kasten, Jr., Wisconsin
John McCain, Arizona
Conrad Burns, Montana
Slade Gorton, Washington
Trent Lott, Mississippi

move toward the next century and beyond, Amateur Radio must not lose its valuable allocations.

You can make a difference: It's up to you to spur your Senators to ensure prompt action on the bill. Send them a simple note urging them to become co-sponsors. If enough co-sponsors sign onto the bill, its chances of being passed will be greatly increased. There is no need to compose an elaborate message: The reasons why the bill should be adopted are contained in its wording.

Timing is Important

This is a project for all League members (ALL hams). It won't take much time, it requires only that you write two short letters - soon. August is a good time, because Congress isn't in formal session for most of the month. That gives Congressional aides and staffers more time to consider new legislation such as S. 1372. Please send copies of your letters to Perry Williams, W1UED, at ARRL Headquarters (225 Main St., Newington, CT 06111). The Washington team uses these letters to open the way to in-person visits to Senatorial staff members.

- The ARRL Letter, 7/11/91
(Published by the American Radio Relay League, Newington, CT 06111)

A complete list of Wisconsin's Senators and Representatives is on the next page. □

H.R. 73 Update

The House version of S. 1372, H.R. 73, has attracted 116 co-sponsors as of July 10; they are listed below, by state. Please check to see whether your own Representative is listed there; if not, please write to ask for his or her support, even if you wrote earlier in the year. We will continue until a majority of Members of Congress have signed on as co-sponsors. Then, if there has been no action on the bill by a very busy Subcommittee on Telecommunications and Finance, the matter can be called up under suspension of the rules and passed by the House.

Alabama
William Dickinson (R-2)
Claude Harris (D-7)

Alaska — None

Arizona
Bob Stump (R-AZ)

Arkansas
Bill Alexander (D-1-AR)
John Paul Hammerschmidt (R-3)

California
Frank Riggs (R-1)
Ron Dellums (D-8)
Pete Stark (D-9)
John Doolittle (R-14)
Robert Lagomarsino (R-19)
Elton Gallegly (R-21)
Julian Dixon (D-28)
Robert Dornan (R-38)
Christopher Cox (R-40)
Ron Packard (R-43)

Colorado — None

Connecticut
Barbara Kennelly (D-1)
Sam Gejdenson (D-2)
Christopher Shays (R-4)

Delaware — None

Florida
Earl Hutto (D-1)
Cliff Stearns (R-6)
Harry Johnston (D-14)
Tom Lewis (R-FL)

Georgia
Lindsay Thomas (D-1)
Charles Hatcher (D-2)
Ben Jones (D-4)
Ed Jenkins (D-9)

Hawaii — None

Idaho — None

Illinois
Marty Russo (D-3)
William Lipinski (D-5)
John Edward Porter (R-10)

Harris Fawell (R-13)
Dennis Hastert (R-14)
Lane Evans (D-17)
Richard Durbin (D-20)

Indiana

Jill Long (D-4)
Jim Jontz (D-5)
Dan Burton (R-6)
Frank McCloskey (D-8)
Andrew Jacobs (D-10)

Iowa
David Nagle (D-3)
Fred Grandy (R-6)

Kansas
Pat Roberts (R-1)
Jim Slattery (D-2)

Kentucky
Carroll Hubbard Jr. (D-1)

Louisiana
Billy Tauzin (D-3)
James Hayes (D-7)

Maine
Olympia Snowe (R-2-ME)

Maryland
Wayne Gilchrest (R-1)
Thomas McMillen (D-4)
Kweisi Mfume (D-7)
Constance Morella (R-8)

Massachusetts
Gerry Studds (D-10)

Michigan
Dave Camp (R-10)
David Bonior (D-12)

Minnesota
Gerry Sikorski (D-6)
James Oberstar (D-8)

Mississippi — None

Missouri
Bill Emerson (R-8)
Harold Volkmer (D-9)

Montana
Pat Williams (D-1)

Nebraska — None

Nevada — None

New Hampshire
William Zeliff (R-1)
Dick Swett (D-2)

New Jersey
Frank Pallone (D-3)
Bernard Dwyer (D-6)
Robert Roe (D-8)
Dean Gallo (R-11)

New Mexico — None

New York
George Hochbrueckner (D-1)
James Scheuer (D-8)
Ed Towns (D-11)
Hamilton Fish (R-21)
Gerald Solomon (R-24)
Frank Horton (R-29)
John LaFalce (D-32)

North Carolina
Walter Jones (D-1)
Tim Valentine (D-2)
Martin Lancaster (D-3)
David Price (D-4)
Stephen Neal (D-5)
Charlie Rose (D-7)
Bill Heiner (D-8)
Charles Taylor (R-11)

North Dakota — None

Ohio
Ralph Regula (R-16)
James Traficant (D-17)

Oklahoma
Mike Synar (D-2)

Oregon
Robert Smith (R-2)
Peter DeFazio (D-4)
Mike Kopetski (D-5)

Pennsylvania
John Murtha (D-12)
Bill Clinger (R-23)

Rhode Island
Ronald Machtley (R-1)

Jack Reed (D-2)

South Carolina
Arthur Ravenel (R-1)
Butler Derrick (D-3)
Elizabeth Patterson (D-4)

South Dakota
Tim Johnson (D-AL)

Tennessee
James H. Quillen (R-1)
Marilyn Lloyd (D-3)
Jim Cooper (D-4)
Bob Clement (D-5)
Bart Gordon (D-6)

Texas
Jim Chapman (D-1)
Charles Wilson (D-2)
Ralph Hall (D-4)
John Bryant (D-5)
Ronald Coleman (D-16)
Albert Bustamante (D-23)

Utah
Wayne Owens (D-2)

Vermont
Bernie Sanders (I-AL)

Virginia
Owen Pickett (D-2)
Rick Boucher (D-9)

Washington
Sid Morrison (R-4)
Norman Dicks (D-6)

West Virginia
Harley Staggers (D-2)
Robert Wise (D-3)
Nick Rahall (D-4)

Wisconsin
Steve Gunderson (R-3)
Gerald Kleczka (D-4)

Wyoming — None

American Samoa
Eni F. H. Faleomavaega (D)

Puerto Rico
Jamie Fuster (D)

220-222 MHz: The End is Near

Radio Amateurs are reminded that 40% of our 1.25 meter band will be handed over to big-money land mobile interests in August. All amateur use of the 220-222 MHz portion of our former 220-225 MHz band must cease at 0000 UTC August 28, 1991 (7 p.m. CDT Aug. 27).

League Continues Push for "Scanner Law" Decision

Citing overwhelming support from concerned agencies and individuals, the American Radio Relay League has again asked the FCC to issue a declaratory ruling to preempt local "scanner laws" (PR Docket 91-36).

In reply comments filed July 8, the League noted that since the FCC issued its Notice of Inquiry seeking input on the matter last February, *no* comments were filed by any state or municipality *in favor* of restrictive scanner ordinances.

Comments filed supporting Amateur Radio operators (against restrictive scanner laws) by public service organizations and federal, state, and municipal entities who benefit from our public service capabilities were overwhelming.

In its NOI, the FCC sought input on the feasibility of redesigning or modifying Amateur Radio equipment to comply with a handful of local and state laws that prohibit the operation of certain radio equipment in cars and trucks.

The League's position, stated in two rounds of comments, is that federal law preempts states and

municipalities from regulating radio receivers (much the same as the FCC has maintained in PRB-1, which prohibits states and municipalities from legislating restrictive antenna ordinances).

The issue hinges on laws such as a New Jersey statute that makes it a misdemeanor to operate from an automobile any receiver capable of listening in on fire, police, municipal or other "governmental" frequencies without a permit.

Perhaps the most notable comments filed in support of the League's position come from the Manager of the National Communications System (NCS). These address the adverse impact of state and local receiver regulation on the NCS's National Security Emergency Preparedness (NSEP) plans, the Military Affiliate Radio System (MARS), and the Shared Resources (SHARE) programs.

MARS uses frequencies adjacent to the ham bands, and Amateur Radio equipment is typically used.

The SHARES program is intended to provide a single, federal interagency emergency message handling system that brings together the resources of federal departments and agencies and affiliated entities when regular communications channels are destroyed. Amateur Radio operators, whose equip-

ment can generally receive outside Amateur Radio frequencies, are an integral part of the program.

According to the NCS, "neither of these programs could include the valuable assistance of amateurs if their equipment were incompatible with that of the government. Clearly, then, it is in the public interest for amateurs to be able to receive non-amateur frequencies."

The League's position is further supported by county and state disaster-preparedness officials from around the country. Many cite the desirability of amateurs having the ability to monitor VHF public service frequencies "....to have full understanding of all aspects of a disaster situation, thus making their own communications contribution more effective."

The Reply Comments' introduction sums it up this way:

"The states which have made reasonable accommodations for amateur radio operators have nothing to fear from this proceeding, and those few whose statutes or local ordinances are overbroad and fail to make accommodation for amateur radio have nothing to say in their defense."

- *The ARRL Letter*,
July 11, 1991

To Contact Wisconsin Members of Congress..

Addresses and phone numbers of Wisconsin members of Congress are listed below.

Les Aspin:

1st Dist. - Democrat

Suite 2336 Rayburn House Office Building, Washington, D.C. 20515. (202) 225-3031. District Office: 50 S. Main St., Janesville, WI 53545. (608) 752-9074.

Scott Klug:

2nd Dist. - Republican

Suite 1224 Longworth House Office Building, Washington, D.C. 20515. (202) 225-2906. District Office: 16 N. Carroll St., Madison, WI 53703. (608) 257-9200.

Steve Gunderson:

3rd Dist. - Republican

Suite 2235 Rayburn House Office Building, Washington, D.C. 20515. (202) 225-5506. District Office: 622 E. Highway 54, P.O. Box 2475, Black River Falls, WI 54615. (715) 284-7431.

Gerald Kleczka:

4th Dist. - Democrat

Suite 226 Cannon House Office Building, Washington, D.C. 20515. (202) 225-4572. Wisconsin Office: 5032 W. Forest Home Ave., Milwaukee, WI 53219. (414) 297-1140.

Jim Moody:

5th Dist. - Democrat

Suite 1019 Longworth House Office Building, Washington, D.C. 20515. (202) 225-3571. District Office: 135 W. Wells St., Suite 618, Milwaukee, WI 53203. (414) 291-1331.

Thomas Petri:

6th Dist. - Republican

Suite 2245 Rayburn House Office Building, Washington, D.C. 20515. (202) 225-2476. District Office: 14 Western Ave., Fond du Lac, WI 54935. (414) 922-1180. Toll-free: (800) 242-4883.

David Obey:

7th Dist. - Democrat

Suite 2462 Rayburn House Office Building, Washington, D.C. 20515. (202) 225-3365. District Office: 317 First St., Wausau, WI 54401. (715) 842-5606.

Toby Roth:

8th Dist. - Republican

Suite 2352 Rayburn House Office Building, Washington, D.C. 20515. (202) 225-5665. District Office: 126 N. Oneida St., Appleton, WI 54911. (414) 739-4167.

James Sensenbrenner:

9th Dist. - Republican

Suite 2444 Rayburn House Office Building, Washington, D.C. 20515. (202) 225-5101. District Office: 120 Bishop's Way, Brookfield, WI 53005. (414) 784-1111.

Robert Kasten:

Senator - Republican

Suite 110 Hart Senate Office Building, Washington, D.C. 20510. (202) 224-5323. Madison Office: 6515 Watts Road, Room 203, 53719. (608) 264-5366.

Herbert Kohl:

Senator - Democrat

Suite 330 Hart Senate Office Building, Washington, 20510. (202) 224-5653. Madison Office: 14 W. Mifflin St., Suite 312, 53703. (608) 264-5338.

Ohio Tower Victory

After a four-year battle, including a federal lawsuit, Jim MacMillan, WA8ZHN, has installed his 3-element Yagi atop a 30-foot mast in the Ohio town of Rocky River, near Cleveland, on Lake Erie. MacMillan sued the city when its **Board of Zoning Appeals (BZA)** refused to grant him a permit for a tower. Then-U.S. District Court Judge Frank J. Battisti ordered the city to reconsider the application, taking into account FCC regulation PRB-1.

The court ruled that the BZA clearly ignored PRB-1, and that it would hold the BZA members personally liable if they continued to deny a permit without a compelling reason. The city reversed its decision after hiring two real estate appraisers, who agreed that MacMillan's antenna would have no effect on neighboring property values.

MacMillan was represented by ARRL volunteer counsel Bob Winston, W2THU, who has won three other tower cases in the Ohio courts, and represented other amateurs before their zoning officials.

"This must be the shortest tower ever litigated," Winston said. The city of Rocky River was required to pay Winston's attorney fees.

- *The ARRL Letter*, 7/11/91

To all of the volunteer authors, photographers, cartoonists, and the other volunteers who make Badger State Smoke Signals possible every month: THANK YOU! Without your skills, wit, and your willingness to share your work with our readers, this newspaper could not and would not exist!

FCC WARC Recommendations Include Improved 40-Meter Band for Amateurs

At an open meeting June 13, the Federal Communications Commission adopted its recommendations for U.S. proposals to the 1992 World Administrative Radio Conference. The recommendations, contained in a Report in General Docket 89-554, include the realignment of the amateur and broadcasting bands at 7 MHz to eliminate the overlap between the two services, while retaining 300 KHz of bandwidth for amateurs by shifting the amateur allocation down 100 KHz and broadcasters up 100 KHz.

The 40-meter recommendation is similar to what the U.S. proposed at the 1979 WARC, but had to settle for the status quo when there was insufficient support for the proposal in other countries. In fact, at WARC-79, the Amateur Service held onto its Region 2 allocation of 7100 to 7300 KHz by only a slender thread. The new recommendation still faces an uphill battle abroad; the HF spectrum below 10 MHz houses many competing interests, and reductions in existing allocations to the fixed service (which is likely to bear the brunt of any broadcasting expansion) will be resisted by many countries' delegations. Even if adopted, a number of years would pass before implementation; the U.S. is proposing an effective date in the year 2007!

Changes in HF Broadcasting Proposed

The FCC recommendations for the HF bands below 30 MHz are essentially unchanged from the Second Notice of Inquiry. They call for substantial expansion of HF broadcasting bands (though not as much as some broadcasters want) and the phasing out, in 15 years, of double-sideband AM in favor of reduced-carrier single-sideband emission in the HF broadcasting bands. The use of reduced-carrier SSB will require a new generation of shortwave receivers.

In explaining why it did not respond favorably to a proposal by one commentator for the expansion of HF broadcasting at the expense of the amateur 80 and 40 meter bands, the FCC said: "We agree with the ARRL regarding the importance of these bands and believe that the impact of the loss of these bands on the amateur community would be severe, greatly limiting their ability to provide reliable international emergency and disaster communications. We therefore reject this proposal."

The FCC Report contains good news regarding the 420-MHz amateur band. A proposal to reallocate the 420-421 MHz portion of the band for use by low-earth-orbit (LEO) mobile satellites has been abandoned in the face of opposition, including that of the League and AMSAT.

The only other amateur band directly affected by the recommended U.S. proposals is the 2300-2450 MHz band, which is being eyed by a number of services. A mobile satellite uplink at 2390 to 2430 MHz is proposed, but the secondary amateur allocation would remain (along with the footnote provisions that permit amateur satellites to use 2400-2450 MHz) on a secondary basis. Some spectrum between 2300 and 2390 MHz also is proposed for

digital audio broadcasting (DAB), both satellite and terrestrial, but the exact frequencies have not yet been determined. There may also be a "domino effect" from aeronautical flight test telemetry that may be moved to 2430-2450 MHz from lower-frequency bands, should the latter be reallocated for DAB. Broadcasters are skeptical of the practicality of a DAB allocation at 2300 MHz, preferring frequencies near 1500 MHz that are now in use in this country for aeronautical flight test telemetry; aerospace interests are fighting hard to retain them.

The U.S. proposals for WARC-92 are now due in Geneva. Considerable discussion between the three domestic players - the FCC, the National Telecommunications and Information Administration (NTIA), and the Department of State - already has

taken place. However, it is still possible that the final U.S. proposals for the conference will differ in some respects from the FCC recommendations.

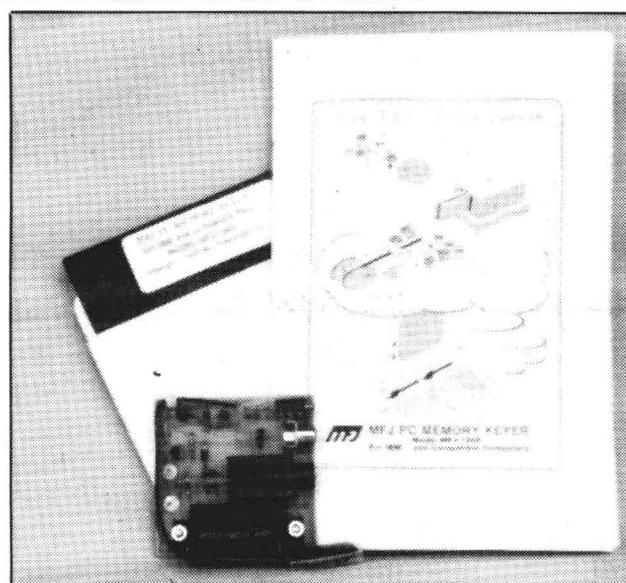
The proposals of other countries are expected to begin surfacing shortly.

For background, see "WARC-92 - What it Means to You" in June *QST*, page 17.

- The ARRL Letter, 6/27/91

Does your local library have *Badger State Smoke Signals* on its periodical shelf? If it does, it may bring your club new members and new Radio Amateurs! If your library doesn't have BSSS, (1) perhaps your club could subscribe for the library or, (2) take a copy to your head librarian and suggest that they subscribe! A subscription form is on page 5 of every issue.

New Products



MFJ-1268 PC MEMORY KEYER

MFJ Enterprises, Inc. announces the release of the new MFJ-1268 PC Memory Keyer -- an amazing combination of IBM compatible software and hardware that turns your computer into the world's most powerful memory keyer, for only \$49.95.

The MFJ-1268 PC Memory Keyer hooks easily between your computer and radio. You get a total of 100 function key macros that you can easily set to any messages or characters. You can set a macro to send a second macro at any point. Also, you can set a macro to pause a pre-set period for you to key in characters (or use paddle). You can also set them to send some characters faster or slower than others.

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Other features include incrementing serial numbering, speeds from 5-40 words per minute, variable speaker tone (or speaker off), weight adjustment, and instant access to on-line help, common CW abbreviations, Q-signals, and official ARRL NTS traffic codes.

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- MFJ news release



**MFJ-941E CROSS-NEEDLE
HF ANTENNA TUNER**

MFJ Enterprises, Inc. announces the release of the new MFJ-941E Super Value Cross-Needle HF Antenna Tuner, for \$109.95

The MFJ-941E gives you a 300 watt PEP antenna tuner that covers everything from 1.8-30 MHz - plus, you get a lighted cross-needle meter, antenna switch, and 4:1 balun, all for an incredible \$109.95

The new cross-needle meter shows SWR, forward and reflected power simultaneously. It reads forward/reflected power in 300/30 and 30/5 watt ranges. Meter lamp uses 12 VCD or 110 VAC with MFJ-1312, \$12.95.

Front panel mounted antenna switch selects 2 coax lines, direct or through tuner, random wire/balanced line, or external dummy load. Efficient 12-position airwound [coil] gives lower losses and more watts out. 1000 volt capacitors. The tuner is housed in a black aluminum cabinet with a black brushed aluminum front panel. It measures 10-5/8"W x 2-7/8"H x 7"D.

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- MFJ news release

Racine Megacycle Club

Arne Moxness, KA9ZPY, Secretary

3345 Newman Road • Racine, WI 53406

Racine Megacycle Club Meeting • July 8, 1991

President Dave, WB9USI, opened the meeting at 7:30 PM. The June meeting minutes were approved as shown in the *Badger State Smoke Signals*.

25 people attended the meeting.

Dave, WB9ZIO, gave the treasurers report. New balance is \$379.63 plus \$114.23 earmarked for next year's ham banquet.

Old Business

Jim, KB9CCY, gave a report on the successful Field Day at Armstrong Park. He said he was grateful for the good morning turnout. The weather was not the best, but by noon all was ready as planned. We ended up with three tents; CW and Packet in one tent, voice and food in the second and 10 meter Novice in the third tent.

Several antennas were up, including beams and verticals. Bill, W9OVC, who has indicated that this was his last year as generatorman, had the generator ready. Gene, KB9CKY, with his XYL's help, had arranged for the food.

Jim, KB9CCY, told me he has everything ready for next year's event already, with several people committed to help, and has listed all improvements he plans to introduce then. Bill, W9OVC, has made up a listing of generator maintenance and use.

Gene, WB9CKY, reported a \$9.00 food profit, which was turned over to the club.

New Business

Bob, W0WLN, reported on the QCWA picnic, which is planned for Aug. 18 at the Decision Farm on Six Mile Road. Everyone is welcome. There will be competition for all hams in an event, which is to be announced. Be there!

Dick, W5ONL, reported on the planned Megacycle Picnic at his QTH for Aug. 12. It is a Pot Luck and the liquids will be furnished. Address is 517 Sheridan Road (HWY 32), about half a mile south of the Hobnob on the same side. Look for a pillared entrance just south of the open area towards the lake. Dick just got his tower erected with help of local hams.

Bob, W0WLN, turned over to the club \$45.00, which were proceeds from the sale of equipment donated by Jim, WQ9M. A thank you letter will be sent to him.

President Dave, WB9USI, reported on the directors' meeting last week, where Arne, KA9ZPY, proposed the purchase of a computer for the club. A committee was appointed with Bruce, K9RRS, as

Chairman. Other members of the committee are: Arne, KA9ZPY; Dan, KA9OIL; and President Dave, WB9USI. The committee will look into the purchase of the computer, and how to utilize it.

Dennis, WB9SVM, discussed the need for replacement of the Swan transceiver, which requires tubes that are no longer available. There was also discussion about the need for new antennas for Field Day.

The "Goody Box" was won by WB9SVM. The meeting was adjourned at 8:05 PM.

Program

Rev. Jim, WA0PFV, held a very interesting program about his recent trip to Spain and Portugal. He showed samples of his watercolor paintings and showed a number of slides. Thank you, Jim, for a very informative and well-run program.

After the program Arne, KA9ZPY, showed his very low cost packet TNC. It is purchased as a kit and comes with a diskette containing files and manual. Contact Arne if you are interested in information on how to purchase it.

Respectfully submitted:
Arne, KA9ZPY

Calendar of Events Racine Megacycle Club

Aug	12	Megacycle Meeting (picnic)
Aug	18	Hamfest at Elgin
Aug	18	QCWA Picnic
Aug	23	Fox Hunt
Sep	1	Kenosha Ham Breakfast
Sep	7	ARRL Testing at Red Cross
Sep	8	Hamfest at Joliet
Sep	9	Megacycle Meeting (Show and Tell)
Sep	16	QCWA Meeting
Sep	20	Fox Hunt
Sep	21	
and	22	Hamfest at Greyslake
Oct	5	Hamfest at Green Bay
Oct	5	ARRL Testing at Red Cross
Oct	6	Kenosha Ham Breakfast
Oct	13	Hamfest at Waukesha
Oct	14	Megacycle Meeting
Oct	18	Fox Hunt
Oct	20	QCWA Meeting
Oct	29	Lakeshore Repeater Ass'n Meeting
Nov	2	ARRL Testing at Red Cross
Nov	3	Hamfest at Kaukauna
Nov	3	Kenosha Ham Breakfast
Nov	9	Hamfest at Serbian Hall
Nov	11	Megacycle Meeting
Nov	15	Fox Hunt
Nov	18	QCWA Meeting

Sometimes, It's Amazing..

James Oberto, WA9YYV/7, who eaves-drops from Phoenix, Arizona, contributed the following bits of conversation that he heard on a Phoenix area 2M voice station. The operators were two KB7 calls, probably newcomers to the wonderful world of Amateur Radio. They were discussing a high-tech subject - how to access a repeater - when Jim perked up his ears.

"They were stunned by our ZIA link out here," he writes, "and were taken aback by hearing CW code on the repeater. As a matter of fact, operator A said to operator B: 'I thought this new ruling said we didn't have to know code, but that repeater is using code for something.' When station A turned it over to station B, the new op replied: 'I think they call that *ideaing*.'"

I really don't know what operator B meant by that, but it definitely sounds technical, doesn't it? The rest of the conversation dialogue, as reported by Jim, goes like this:

Station B: "Your new rig sounds good, but it's too loud at this end and it makes it hard to understand on this end. Turn down your volume a little bit."

Station A: "Okay, I turned the volume down a little bit. How do I sound now?"

Station B: "It's still too loud. Turn it down a whole lot and see what happens."

Station A: "Okay, it's down. How do I sound now?"

Station B: "Still way too loud. Turn it way down."

Station A: "Gee, if I turn it down any more I won't be able to hear you."

Station B: "Well, I guess you'll have to take it to somebody and have them repair it. I don't know why turning your volume down should make it hard for you to hear me. I can't understand it. Maybe you got a bum rig."

Station A: "Yeah, just my luck. Oh, by the way, what is this 146.52 stuff? I can't understand why they number these channels like that. Do you know?"

Station B: "No, but I guess we'll find out. I don't know if I'm going to like this ham stuff or not. Bye bye and see you later."

Jim concludes his report with this statement: "Jeepers, I hope this isn't indicative of what we can expect with this no-code fiasco. Do you think prayer will help?"

- From "The Digital Bus", by Bill Snyder, W0LHS, in *Worldradio*, July, 1991

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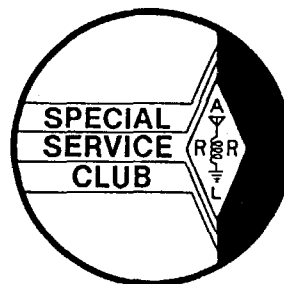
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(608) 276-7915



Riverland Amateur Radio Club

Karl Simonson, KB9EQI, Secretary

P.O. Box 2251 • La Crosse, WI 54602-2251



July 2, 1991 Meeting Minutes

The July 2nd meeting of the Riverland Amateur Radio Club was called to order by our President, Walt Altus, AA9AW, at 7:45 p.m.

The Secretary's Report was called. Our Secretary, Karl Simonson, KB9EQI, reported that he did not have a written copy of the report available. The Secretary's report is published in Badger State Smoke Signals. Kent, W9LZQ, moved and Charlie, KA9UUK, seconded a motion that the reading of the minutes be waived. The motion was approved.

The Treasurer's Report was given by Walt, AA9AW. Our Treasurer, Arby Boomer, WF9T, was not available for the meeting. The report was approved as read.

Tom, N9KIA, gave a report on Field Day. We scored 1,806 points. Tom also reported that the portable tower we have been using for several years is in need of repair or it must be replaced. The tower will be examined to determine if it is repairable.

The Field Day committee was thanked for their efforts.

Feroz, WU9N, informed us of the program schedule for the next few meetings. In August, a discussion of various packet radio protocols will take place following the meeting. In September a show-

and-tell is scheduled to demonstrate the TCP/IP protocol, and possibly some others.

Van, WA9FIO, gave a report of the TVI research committee with regards to difficulties experienced by one of our members. The situation is being investigated further.

New Business

Kent, W9LZQ, gave a report on an upcoming emergency drill. The drill will consist of a mock oil spill in the Mississippi River near Alma, Wisconsin. This drill will involve several government agencies from the federal, state, and local levels. The La Crosse county Amateur Radio Emergency Service will be one of the participants. Kent stated that there would be emergency communications vehicles coming from Rochester and Winona, Minnesota. He suggested that we have our club's trailer prepared for this event also. The drill will require communications by voice and data (packet) modes. Volunteers should contact Kent as soon as possible. The drill will take place on July 21st.

Karl, KB9EQI, announced that a donation had been made by one of our members to the trailer refurbishment fund on behalf of Van, WA9FIO.

Bill, KE9XQ, asked if anyone has experience with

or information about hybrid rings or plans to homebrew 10 meter duplexers. Bill is planning a new repeater for the La Crosse area.

Guests were introduced by Scott, W9NSR. The guests are seeking their amateur licenses. The guests are James Stenslien and Josh Slack.

Van, WA9FIO, moved, and Nook, K9EGO, seconded the motion to adjourn.

Meeting Attendance

Walt Altus, AA9AW	Member
Charlie Burch, KA9UUK	Member
Joe Mezera, WA9SOQ	Member
Tom Gromacki, N9KIA	Member
Rick Williams, KV9U	Member
Kent Helman, W9LZQ	Member
Hugh Barker, KA0EJZ	Member
John Kass, KE9XO	Member
Dallas Miller, K9LEC	Member
Feroz Ghouse, WU9N	Member
Ralph Jahimiak, WA9OAE	Member
Ray Wakeen, WA9HHM	Member
Wid Johnson, W9DM	Member
Maty Johnson, XYL-W9DM	Visitor
Duane Fruechte, W9HWQ	Member
Judy Williams, N9LGV	Member
Bill Wood, KE9XQ	Member
John Jorenby, KA9ETH	Member
Van Elston, WA9FIO	Member
Nook Bentzen, K9EGO	Member
Don Elsner, KS9F	Visitor
Mike Tessmer, N0BSH	Visitor
Karl Simonson, KB9EQI	Member
Larry Kapp, WT9M	Member
Scott Neader, KA9FOX	Member
Gary Webb, NI9V	Member
S. Scott Lee, W9NSR	Member
James Stenslien, Josh Slack	Visitors

Eau Claire Amateur Radio Club

Carl Searing, W9NW, Secretary

1129 McKinley Road • Eau Claire, WI 54703-2219

July 9, 1991 Meeting

President Bill Jablonske, W9NNS, opened the meeting at 7:30 p.m. and, with the secretary's and treasurer's reports quickly read and approved, discussion immediately began on a number of details concerning the upcoming annual hamfest. Members were urged to sign up for tasks, and reminded that there are still a few tables available.

W9NNS has researched the facilities at the Northern Wisconsin State Fair Grounds in Chippewa Falls, with the possibility of relocating our hamfest to that location next year, primarily because of size limitations at our present site. The membership approved the move by a voice vote.

There will be a work party to sand the club trailer on Thursday, July 11, when several members will meet for pre-painting preparation. We hope to

have the trailer painted and lettered for use at the hamfest.

Jeff Sorte, N9JMB, said that in his capacity as EC, he was studying the possibility of a mailing to members to ascertain operating capabilities during time of emergency.

N9JMA, Mike Ceraso, wondered if the club would consider a construction project, perhaps a class building an SWR bridge or other small device, so that newer Hams might get some hands-on experience, as well as theory. This will be considered at a later meeting.

The club "Blue Book" committee is making progress with revision, and will have a report at the next meeting.

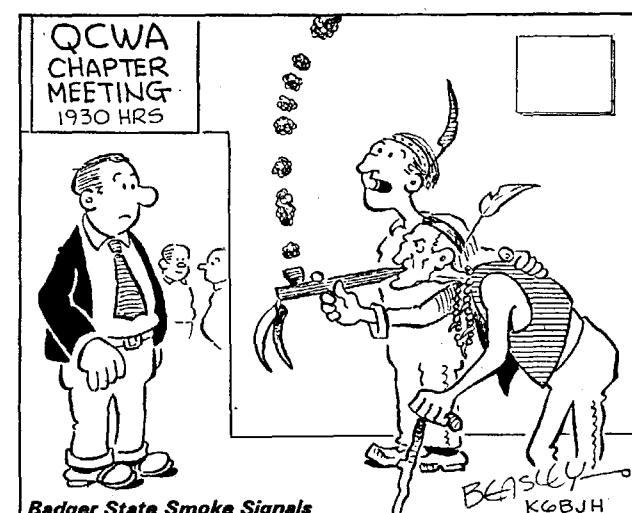
The August meeting will be held in Chippewa Falls at the Cray Supercomputer Museum, not yet open to the public. Our host will be Gale Sorum,

WD9HFT. The museum is the oldest building at the Cray complex in the Industrial Park, off Highway 178.

Lunch Committee for the next meeting: KD9KL and W9NW.

The meeting adjourned at 8:35 p.m.

Respectfully submitted:
W9NW, Secretary

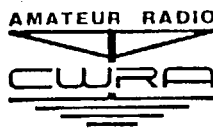


HE SAY: "HAVE-YOU-GOT-ONE-CENTURY-WIRELESS-CHAPTER?"

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At University of Wisconsin, Stevens Point

WATTS SNOO



WB9QFW 2-Meter Repeater 146.07-.67 and Club Station

P. O. Box 847 • Plover, WI 54467

Minutes of July 10, 1991 meeting of the
Central Wisconsin Radio Amateurs at UWSP

(Submitted by Mike Pagel, KA9LAQ)

The meeting was called to order at 7:30 PM by President KA9LAQ.

The roll included:

Art Wysocki	N9BCA
Mike Urban	KB9GXV
Frank B. Podach	N9JQR
Mike Oswald	KB9FVU
Bob Baird	W9NN
Frank L. Guth	W9BCC
Mary Eiden	KA9FAS
Debra Kroll	N9EIL
Gene Kroll	KE9MA
Mike Eiden	WD9JID
Joe Mangal	KA9TTU
Dave Olson	N9JQU
Wendy Duesterhoeft	KA9WEQ
Paul Nelles	K9DB
Dean Holbrook	KB9FSP
Jim Benak	KA9ACE
Mike Smith	N9IAT
Joe Omernik	N9CGV
Mike Pagel	KA9LAQ
Russ Fritz	KB9FVV
Raymond J. Dix Jr.	KF9BG
John Detrick	Visitor

Secretary/Treasurer KF9BG (Ray) presented an updated assessment of the treasury following our SWAPFEST. The Treasurer's report and minutes of the previous meeting were approved.

N9BCA (Art) reviewed the financial results of the 1991 SWAPFEST. Despite the positive overall effect on our treasury, Art pointed to the very low rate of return from the general raffle. He also pointed out that the event was growing to the point where it was increasingly difficult to direct two distinct operations (SWAPFEST and the Raffle). Art announced that someone else would need to assume control of the raffle if we wished to continue it.

Art received a warm round of applause - richly deserved - for his fine effort in planning and implementing the best SWAPFEST yet!

W9BCC (Frank) reported on our Field Day effort. W9NN/9 logged 43 CW contacts and 448 QSO's on phone. With additional points for packet contacts, message traffic and publicity, our point total came to 1,472.

Frank also reported that the Stevens Point Soccer Association would again rent our generator on July 20. Their donation to the treasury more than covers our costs for gasoline during Field Day!

Frank also again encouraged members to write both congressmen and Senators on behalf of HB 73 and SB 72. These bills call for preservation of current allotted spectrum space for Amateur Radio. (See pages 12 and 13 of this issue - BSSS ed.)

KA9TTU (Joe) reported that the Copps Triathlon will be held on Saturday, July 20, and that 12-15 operators are needed along the race route between 8:30 AM and Noon.

Joe received applause, along with N9JQU (Dave) and KA9TTU (Wendy), for their efforts in organizing and directing the Amateur Radio involvement at the Special Olympics Summer Games. They also produced graphic representation depicting the increasing volunteer hours despite a static population of volunteers. Good going!!!

K9DB (Paul) told the group that he would be participating in post-games meetings to analyze the 1991 events. Suggestions for improvement can be made to Paul, and he will return to our club with feedback from the state committee.

Traditionally, the CWRA has sponsored fall Novice classes. If you know of potential students for Novice/Technician or Codeless Technician classes, please notify Joe at 344-1182.

WA9LWJ was thanked for his excellent article and photo in a recent issue of the Stevens Point Journal. John's article mentioned our involvement in SWAPFEST, Field Day and the Special Olympics Summer Games.

KA9LAQ reported that he has been contacted by a local committee working with the local Sister City project that pairs Stevens Point with Esteli, Nicaragua. The group proposes to employ Amateur Radio to communicate with their counterparts in Esteli. KA9LAQ is investigating the legality of the proposed message traffic.

Our Annual Fox Hunt is on Sunday, August 11. Participants must report to the parking lot across the street from the Club Station on Maria Drive (talk-in on 146.985) where the rules and related information will be distributed. The frequency (2 meters) will also be announced at that time. This event is open to all interested participants, and the winner becomes the Fox for the 1992 hunt! Rules are being authored by this year's Fox (NE9U).

Following the hunt, there will be a cookout at the W9NN QTH. Please bring your own food and beverages. Bob also suggests that you bring your own lawn chairs. An extra grill or two would also

be handy. Mosquito repellant is an option. This event will occur rain or shine, so please join us for a wonderful wind-down from a busy summer. Bob has promised to waive the usual 50 cents per flush rule. If you do not participate in the Fox Hunt, plan on arriving at Bob's place about 4:30 PM on the 11th.

KD9JF (Tom) has submitted his resignation from the post of Club Station/Repeater Trustee. KB9FVU (Mike) has agreed to replace Tom in this role.

Our gratitude is extended to KD9JF (Tom Hurning) who, for at least 6 years, tirelessly served as the Trustee for the WB9QFW Repeater (146.07/67) and Club Station. Whenever the system went berserk or broke down, Tom was the first one there. Tom also led the effort to recable the club station, replace the repeater antenna, and repair the repeater when it went dead. His unselfish dedication to the job will be missed.

All are reminded that there will not be a regular business meeting in August.

The meeting ended at 8:43 PM

NOTE: The September meeting will be held on Wednesday, September 11 at 7:30 PM in Room #A-109 of the UWSP Science Building. This meeting features the annual election of officers, and your participation is strongly encouraged! A new President will be elected, and the office of Vice President, Secretary/Treasurer, Engineer, and Activities Director will all be filled. It is indeed possible, my friends, to be elected for a position without actually being at the meeting (ask me how I know this...). Your absence does not shield you from the possibility of responsibility. Please be there!

While we are on the subject of the future, all are reminded that our fiscal year ends on September 30. Dues for the new year (beginning on October 1) are due by September 30. Our usual grace period will not be possible, as we pay the BSSS to send issues to our members. It is likely that we will be unable to do so if you have not paid your dues so, for your own sake, please pay your dues on time! Come to the September meeting with check in hand, or send your check to the CWRA at Box 847, Plover, WI 54467. □

Amateur Radio Awareness Day

Amateur Radio Awareness Day will be held September 7. To make the public more aware of the existence, purposes, and benefits of Amateur Radio, clubs and individuals will set up and operate public displays across the nation in schools, libraries, town halls, parks, fairs, and anywhere else an imaginative club can think of. Start planning your club's public exhibit now - ARRL Headquarters can help.

For tips on setting up your exhibit, check out *The ARRL Special Events Communications Manual*, available from HQ (225 Main St., Newington CT 06111) for \$5, plus \$2.50 shipping/handling. Upon request, HQ will also provide you with promotional brochures for distribution at your booth.

- The ARRL Letter, 7/11/91

Taylor County Area Amateur Radio Club

Rolland Walty, W9LEE, Secretary

W4117 Highway 102 • Westboro, WI 54490

Next club meeting: August 8, 7 p.m. in the Taylor County Courthouse Annex, corner of 2nd and Ogden, Medford.

Don't forget our 2-meter net at 8:30 p.m. each Wednesday on the Medford repeater (147.75/.15). If you can key up the repeater, check in and say hello!

Minutes of July 11 Meeting

Members present were W9LEE, KE4FE, N9GHZ, KB9BLV, N9GEN, and WD9C. The meeting was called to order at 7:11 p.m. by Presi-

dent N9GEN.

Minutes of previous meeting were read and approved. The treasurer being absent, there was no treasurer's report.

The new repeater on the air at Sheldon, and its probable benefit to club members in the western part of the Taylor County was discussed. The possibility of linking our repeater to it, rather than setting up a remote receiver as previously considered, was brought up but no action was taken, there being no members from that end of the county present.

The Medford packet digipeater was discussed briefly. The interference problem is still of concern,

and the search for a new location will continue.

Two representatives of the Boy Scouts of America attended the meeting, and outlined the Explorer program to the members present. They would like to establish a post with emphasis on Amateur Radio in the Medford area, with the club as sponsor. It was decided to table any action on the matter until the next meeting.

It was decided to hold a VEC test in Medford, tentative date October 5, at a site yet to be determined.

Concern was expressed about the lights on the NCTI tower not flashing. N9GHZ reported that he had received no reply to the letter he wrote to NCTI about the matter.

Congratulations and welcome to several new members of the club: Mike, N9LIF, and Sherry, N9LSC, of Merrill, and Rich and XYL and harmonic (no calls yet), from Stanley.

Meeting adjourned at 9:05 p.m.

Rolland Walty, W9LEE, Secretary

Personal Greetings

Happy Birthday!

Best wishes for a very happy birthday on August 1 to Mary, the young lady in the photo at right! We won't tell you her age, but we will tell you that this photo was taken by her brother in 1956. Her brother is the editor of *Badger State Smoke Signals*, Jim Romelfanger, K9ZZ. Many happy returns of the day, sis!

- Jim



RADIO EXPO

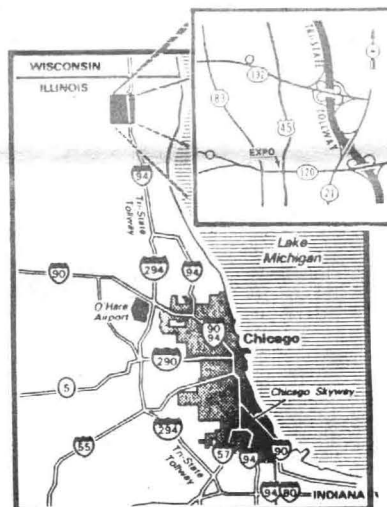
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SEPTEMBER
21st & 22nd**

91

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Please include a self addressed stamped envelope.

• **Hamfest Sponsors:** U.S. Postal Service Regulations prohibit advertising door prizes through the mail. If BSSS publishes an ad or swapfest announcement which includes door prizes, we must delete any reference(s) to such prizes.

• **Having delivery problems with** Please report late delivery of your newspaper to your postmaster and to Ken Ebnetter, K9EN (See masthead on page 2). BSSS is usually mailed from Portage, WI, on the last Wednesday or Thursday of each month. □

Yellow Thunder Amateur Radio Club

Duane Grotophorst, KA9HKL, Secretary

K9ODK
WB9FDZ

E5767 South Line Road • Loganville, WI 53943



Minutes of July, 1991 Meeting

The July, 1991 meeting was called to order at 7:42 p.m. by Vice-President Steve Schwoegler, WB9RNL. The following members and guests were present:

Peter Sweeney, WD9JIB	Reedsburg
Charles Tilton	Baraboo
Duane Grotophorst, KA9HKL	Loganville
Steve Schwoegler, WB9RNL	Wis. Dells
Harry Westlund, K9EHJ	Baraboo
Rohbert Hemmer, N9LXX	Baraboo
L.J. Hemmer, WB9TFJ	Baraboo
Harry Mayland, K9FFT	Baraboo
Jim Decker, WB9UQT	Baraboo
Bob Sauvan, WT9Q	Sauk City

The minutes of the June meeting were approved

Steve, WB9RNL, gave a report on the YTARC Field Day, which was one of the more active and highest scoring efforts in several years.

The treasurer's report was accepted.

The discussion turned to possible future programs, with several good ideas put forth.

I gave an update on the VE test session, scheduled for July 20.

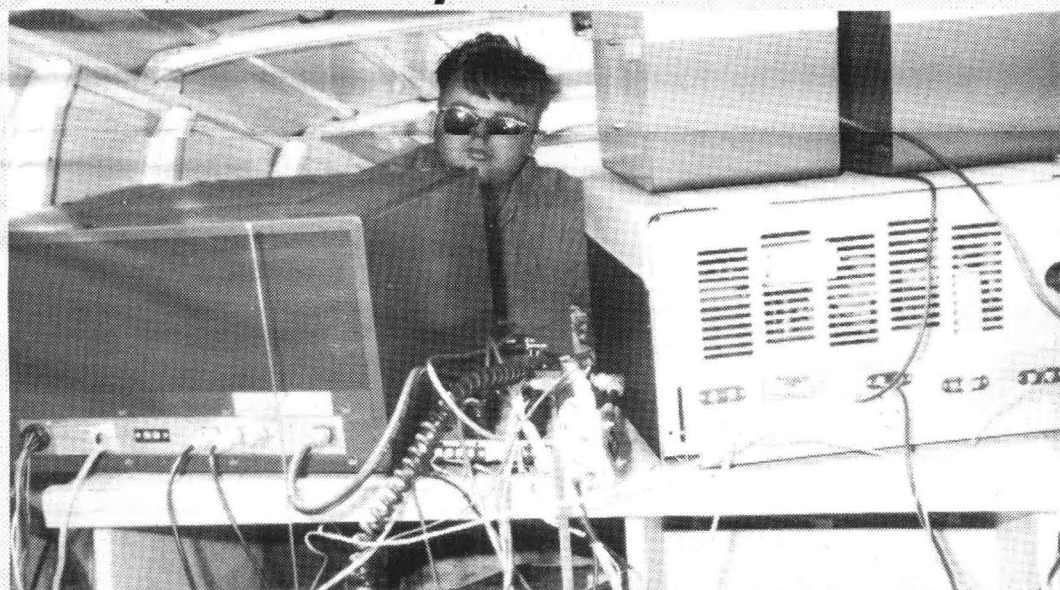
Buck Nite winner was Art Kleefisch, W9WSS, who was not present. Next month, the prize will be \$4.00.

Meeting adjourned at 8:20 p.m.

Next month's meeting is on Wednesday, August 14, in room 14 of the Baraboo Civic Center, 2nd and Ash Streets, Baraboo.

Duane Grotophorst, Secretary

Field Day - Circa 1961



This photo, which was taken at the same non-club Field Day operation as the photo on page 6, shows BSSS Chairman/Circulation Department, K9EN (then K9 Girl Scout Cookies). He is operating a Heathkit Apache transmitter (left side of photo), and using a National NC-300 receiver (right side). I believe one of the boxes atop the receiver contains a speaker for the receiver, and the other is a VHF converter. Nice shades, eh?

- Photo by K9PKQ (now K9ZZ)

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ARRL Board Meeting Highlights

The American Radio Relay League's Board of Directors met in Rocky Hill, Connecticut July 19-20. The following is a summary of the meeting's highlights:

Several actions were taken with respect to the 222 MHz band. An interim 222 to 225 MHz band plan, as proposed by the VUAC, was adopted. The Board also endorsed the efforts of local frequency coordinators to reaccommodate repeaters with input frequencies in the lower part of the 222 MHz band to other recognized repeater pairs to reduce the possibility of interference between repeater users and operators using other modes for whom frequencies below 222 MHz will no longer be available after August 27.

The Board also directed the filing of a Petition for Rulemaking with FCC seeking a shift in frequencies permitted for repeater and Auxiliary operation to 222.150 to 225.000 MHz.

Finally, the League will seek from the FCC full access to the 222 to 225 MHz band for Novice Class licensees.

The League's Digital Committee was reoriented towards the operational aspects of the developing data communications network. New members will be selected by the President.

A future systems committee will be formed to consider technology issues in the five to fifteen year time frame. The President will select five members, based on their knowledge of telecommunications system development.

A 6-meter band plan, as proposed by the VRAC, was adopted.

The VUAC and VRAC were charged with reviewing the 33cm band plan in view of the establishment of major operations by another user of the band.

The Board recognized long-time *QST* and publications author Doug DeMaw, W1FB, for his many contributions to Amateur Radio.

AMSAT members were also applauded for their support, as partners with ARRL, for the Shuttle Amateur Radio Experiments and other Amateur Radio educational projects.

The Board endorsed concepts advanced by AMSAT for a Phase 3-D amateur-satellite system, and pledged the League's cooperation.

ARRL will pursue discussions with organizations which influence the development of land use regulation of antennas in order to promote ordinances compatible with the PRB-1 mandate.

Keri Miller, N6TME, was named 1990 recipient of the Hiram Percy Maxim Award for 1990.

The Board selected William Helmetag, WA2-VQG, as the recipient of the Herb S. Brier Instructor of the Year Award for 1990. Peter Kemp, KZ1Z, was named 1990 ARRL Instructor of the Year.

Roy Lewallen, W7EL, won the 1990 Technical Excellence Award for his February 1990 *QST* article, "A Simple and Accurate QRP Directional Wattmeter."

The dates of the 1992 National Convention in Huntsville, Alabama, were changed to August 14-15.

- ARRL Bulletin 32, July 20, 1991
From AE9H via WD9ESU packet BBS

1991 Wisconsin Nets Association Picnic

Saturday, September 7, 1991

Ochsner Park in Baraboo, Wisconsin

Playground for the Kids • Zoo

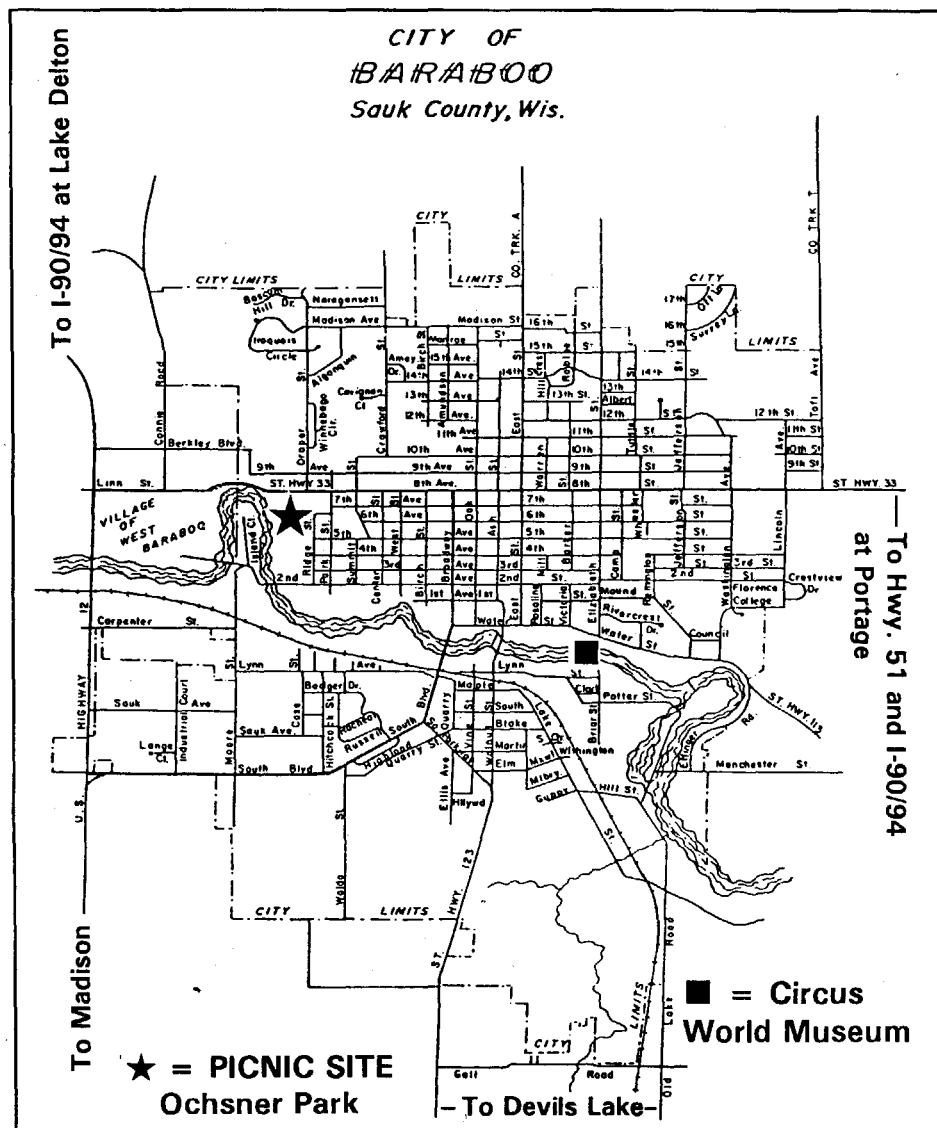
The WNA meeting will start at about 1 p.m.

Talkin stations will be on the 146.88 repeater and on 146.52 simplex.

No camping is permitted at Ochsner Park. There are several private campgrounds in the area, as well as Devils Lake State Park. Here is a list of some of them:

Devils Lake State Park Reservations	(608) 356-6618
Circus City Campgrounds	(608) 356-7304
Hefty's Skillet Creek Farm	(608) 356-4877
Hickory Grove Campground	(608) 356-9805
Nordic Pines Resort and Campground	(608) 356-5810

Other attractions in the Baraboo area include the Circus World Museum (see map) in Baraboo, the International Crane Foundation between Baraboo and Lake Delton, and the Mid-Continent Railroad Museum in North Freedom.

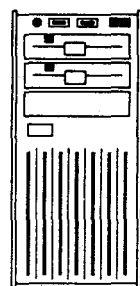


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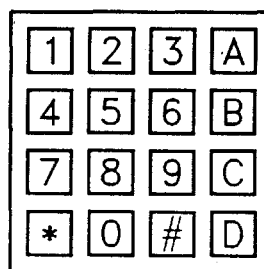
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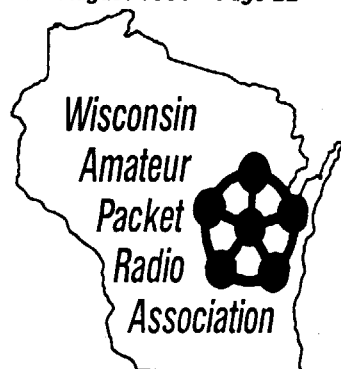
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THE WISCONSIN PACKETEER

William Schroeder, W9ZBD
4247 Forest Point Drive
Rhineland, WI 54501

Steve Loeffler, WB9ZRE, Editor, 123 W. Oshkosh St., Ripon, WI 54971

The regular material for this column was not received in time for publication in this months BSSS. We are printing the following items taken off various BBSs and ARNS.

FSK WITH KAM

If you want to use FSK on packet radio operation with your KAM, you should match the MARK and SPACE tones with those that your transceiver would like to hear or else your transmit and receive frequencies will not track, and you will have to use some sort of incremental tuning. As an example, my rig has an IF Freq. of 9.0106 MHzK!IQQe5?ode, and the BFO is adjusted to 9.008475 - the difference being .002125 - so I use 2100 for my MARK and 2300 for my SPACE. This seems to work quite well, and it can be "tweaked" a bit if necessary to bring things into perfect tracking alignment. These MARK and SPACE parameters are only used by the KAM in the HF packet mode. I have not adjusted my FSK shift to 200 Hertz, but it seems to work quite well using the 170 shift that my rig is aligned to at the factory.

73, WODH @ NXOC

LAWS FOR BROADCAST ENGINEERS
by MEL CROSBY, SEQUOIA ELECTRONICS

1. If anything can go wrong, it will. Everything

goes wrong at once. If there is a possibility of several things going wrong, the one that will cause the most damage will be the one to go wrong first.

2. Whenever you set out to do something, something else absolutely must be done first!

3. It is impossible to make anything foolproof, because fools are so ingenious.

4. There is always an easier way to do anything. When looking directly at the easier way, especially for long periods, you will no see it.

5. Anytime things appear to be going better, you have overlooked something. If you explain so clearly that nobody can possibly misunderstand, somebody will.

6. If you do something you are sure will meet everyone's approval, someone surely won't like it.

7. In case of doubt, make it sound convincing. When forced to choose among alternative courses of action, most people will, unfaillingly, choose the worst one possible.

8. A wire cut to length will be too short. A fail-safe circuit destroys other. Interchangeable parts won't.

9. Every device protected by a fast acting fuse will protect the fuse by blowing first.

10. After a unit has been re-assembled, extra components will be found on the bench.

11. You will always find lost things in the last place you look. Things always fall at right angles.

12. Any device requiring service or adjustment will be least accessible.

13. If you keep anything long enough, you can throw it away.

14. If you throw away, you will need it as soon as it is no longer available.

15. You get the most of what you need the least. If you want to get along, go along.

16. Once you have exhausted all possibilities and fail, there will one solution, simple and obvious, and highly visible to everyone else.

17. Put away a tool you are certain you are done with, and you will need it again, instantly.

18. If it jams, force it. If it breaks, it needed replacement anyway. If you mess with a thing long enough, it will break. Don't force it: get a larger hammer.

19. There is never time to do it right, but there is always time to do it over.

20. All great discoveries are made by mistake. An ounce of image is worth a pound of performance.

21. No matter how much you do, you will never do enough. What you don't do is more important than what you do do.

22. The man who can smile when things go wrong, has thought of someone else he can blame it on.

23. Nothing get built on schedule, or within budget, but it always works better if you plug it in.

24. Any tool, when dropped, will roll into the least accessible corner of the shop.

--radio guide, july 1990

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Wisconsin Amateur Packet Radio Membership Application

Name: _____ Call: _____ Home Phone: _____

Address: _____ City: _____ State: _____ Zip: _____

Home BBS: _____ Monitor Freq.: _____ Hours of Operation: Day: ☐ Night: ☐ 24 Hour: ☐

Station: Power: _____ Ant. Gain: _____ Height: _____ TNC: _____ Computer: _____

Station Capabilities: HF: ☐ 2M: ☐ 220 MHz: ☐ 440 MHz: ☐ Other: _____

I operate a Digipeater: ☐ Alias: _____ Packet BBS: ☐ Software Used: _____

Primary Interest in Packet: _____

Please return this form, COMPLETED, with your check or money order for \$ 12.50 to:

William Schroeder, W9ZBD, 4247 Forest Point Drive, Rhineland, WI 54501

THE TEST POINT (continued from page 3)

Technician class licensees must show proof of testing before March 21, 1987, in order to upgrade to General with a code test only.

Additional information is given below.

MILWAUKEE RADIO AMATEURS' CLUB MRAC/VEC

1991 examination dates:

WEDNESDAY: September 4, October 2, November 6, and December 4, 1991

SATURDAY: September 28, October 26, and November 30, 1991.

WEDNESDAY DATES: Time and Location to be announced at a later date. Please call the following for information: Jack Krause, W9JK, 1737 North 116th St., Wauwatosa, WI 53226. (414) 774-6999. or: Les Peterson, W9YCV, 9741 W. Howard Ave., Greenfield, WI 53228. (414) 321-4745.

SATURDAY DATES: 9:00 am to 12:00 noon at the Wauwatosa Savings and Loan, 7500 West State St. (Lower level) Please arrive promptly so testing can be completed by 12:00 noon.

Bring along your original license and two (2) good quality photocopies, plus two forms of identification, such a driver's license, etc. Also required are a pen and \$5.00 for the exam fee. WALK-INS are welcome. To register in advance, use a post card: print the grade of license you are applying for, and your name, address, and telephone number. Send the card to MRAC/VEC, c/o Jack Krause, W9JK, 1737 North 116th Street, Wauwatosa, WI 53226, or to Ed Seruga, KE9JJ, 3840 South 43rd Street #21, Milwaukee, WI 53220. Telephones: (414) 774-6999 or (414) 545-6299.

BADGER EXAMINERS (BE) - MILWAUKEE

Oct. 13. - KMRA Swapfest (Waukesha)

Unless otherwise noted, examinations are administered beginning at 1:00 p.m. to 3:30 p.m. at St. Nicholas Church basement, 5345 N. Green Bay Ave. (2 1/2 blocks south of Silver Spring), Milwaukee. Walkins are welcome. To register in advance, send a post card with your name, test or tests you wish to take, date you wish to take., your call sign, address and telephone number to Badger Examiners, Gary J. Sharbuno, WI9M, 5119 W. Willow Rd., Brown Deer, WI 53223. Telephone (414) 355-0237.

MADISON, WISCONSIN (ARRL/VEC)

Exams will be held at Fire Station #6, on Badger Rd. (Just off South Park - Enter East door.) The test sessions will begin promptly at 8:00 a.m. Subsequent exams will occur in the fall of 1991. To be scheduled.

EAU CLAIRE, WISCONSIN

1991 dates: Oct. 12

Exams given at the UW/EC Maintenance/Central Stores Building.

KAUKAUNA, WI

November 3, 1991

Held at the FOXCITIES HAMFEST 91, Starlite Club on Hwy. 55, North of Kaukauna. Exams begin at 9:00 a.m. Contact Larry, KD9IA at (414) 788-3823, or Don, NB9J at (414) 766-3886.

MENOMONIE WI - ARRL/VEC

Saturdays: Nov. 2, 1991 and Mar. 28 and Nov. 7, 1992.

The Northern Wisconsin Radio Club administers exams from 9 to 11:30 a.m. at the Westconsin Credit Union Building, Lower level conference room, 444 S. Broadway, Menomonie, WI. Use front entrance of building. Walkins are accepted only to extent of available exam materials.

Contact: Jim Ley, NX9F, (715) 235-3998 (H); or (715) 232-1397 (O).

APPLETON, WI (ARRL/VEC)

Aug. 10, 1991

Sponsored by the Fox Cities ARC. All exams are held at Madison Jr. High School, 2020 S. Carpenter St., Appleton, WI. Contact: KD9IA, (414) 788-3823

ONALASKA, WI

November 11, 1991

Sponsored by the Riverland ARC. Held at the Onalaska Community Center, 515 Quincy St. All exams start at 7:00 pm. Preregistration recommended. Contact: Rick Williams KV9U, 524 Troy St., Onalaska, WI 54650. (608) 783-8028. or Dick Low, KOJYB, 1520 Nakomis Ave., La Crosse, WI 54603. (608) 784-9176 (After Apr. 5th.)

RACINE, WISCONSIN - ARRL/VEC

Monthly - first Saturday, except January, July, and August.

Exams are given at 9:00 a.m. at the Red Cross Building, 4521 Taylor Avenue, Racine. Walkins are permitted. Inquiries and registrations should be directed to William Firchow, Jr., NW9P, 1912 27th Street, Kenosha, WI 53140, telephone (414) 658-8390.

DUBUQUE, IOWA - ARRL/VEC

Exam dates for 1991 are: September 7, and December 7.

The Great River Amateur Radio Club VEs are now field stocked, which means retests can be given immediately.

Exams are held at 9:00 a.m. at the Central Fire Station, 9th and Central in Dubuque. Use the basement entrance on 9th Street. For more info, contact Mike Jozefowicz, NSOU, 2735 Hickory Hill, Dubuque IA 52001, or call Mike at (319) 582-8563. Talkins are on the 147.84/24 and 147.63/03 repeaters. -- (Thanks Art Evans, KA9KLZ)

TOMAHAWK, WI

Last Saturday of every month. Jan. thru Oct.

Tomahawk Volunteer Examiners (ARRL/VEC). Tomahawk, WI. No preregistration required, but appointment would be appreciated. Registration at 8:30 a.m. and testings starts at 9:00 a.m. For location or other information, inquire on 145.43 MHz. repeater or contact: Greg Garner, WA9W, 4088

Highway 51, Harshaw, WI 54529. Telephone (715) 453-7096.

LOVES PARK, IL

Third Saturday of every month. Northern Illinois Volunteer Examiners (DeVry VEC). Held at North Suburban District Library, 6340 North Second St. (Hwy. 251), Loves Park, IL. Contact: Dennis G. Eksten, W9SS, 5006 N. Second St., Loves Park, IL 61111. (815) 877-6768.

MINNESOTA TESTS

August 24, 1991 St Paul Park, MN (SEMARC)
September 7, 1991 St Paul, MN (SPARC)
September 27, 1991 St Paul Park, MN (SEMARC)
October 12, 1991 Bloomington, MN (BARC)
November 9, 1991 Bloomington, MN (BARC)
December 7, 1991 St Paul, MN (SPARC)
December 14, 1991 Bloomington, MN (BARC)
December 21, 1991 St Paul Park, MN (SEMARC)

Locations and contacts:

St. Paul Radio Club (SPRC)
St. Lukes School (cafeteria)
1065 Summit Ave.
St. Paul, MN
contact: Jay Bellows (612) 222-7253

Bloomington Amateur Radio Club (BARC)
Creskide Community Center
98th and Penn Ave. So.
Bloomington, MN
contact: Art Putt (612) 881-7181

SE Metro Area Radio Club (SEMARC)
St. Thomas Aquinas Activity Bldg.
920 Holly Ave.
St. Paul Park, MN
contact: David Harrell (612) 459-1647

The above Minnesota test are listed as a help to readers near or traveling thru the area. If you are interested in any of these, please save this listing as we may not always have space available to list them. Thanks to "Ground Wave" for the above information.

If you plan on taking any of the exams, it is suggested that you contact the sponsoring organization as the date nears to find if there have been any changes in dates or locations.

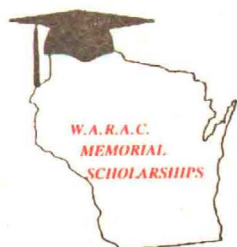
This section of Badger State Smoke Signals is available to publicize your Volunteer Examiner Amateur Radio license examination schedules. Please send us your schedules of dates, times, and locations that you will be conducting examinations and we will include the information here. Be sure to include contact address and any other necessary requirements. Information should be

NORTHERN WISCONSIN RADIO CLUB

Steve Hart, KA9OMC, Secretary
Route 1, Box 54
Knapp, WI 54749

The club does not meet during the summer months. News and information about the club will resume in the September issue of BSBS.

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Extension 58

P.O. Box 102
Milwaukee, WI 53172

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November 3, 1991

Starlite Club, Hwy. 55 north of Kaukauna

HAMFEST INFO:

Don Baker
621 W. 7th St.
Kaukauna, WI 54130
414-766-3886

EXAM INFO:

Larry, KD9IA,
414-788-3823, or
Don, NB9J,
414-766-3886

Lakeshore Hamfest

& Computer Swapfest

Manitowoc County Expo

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Saturday, May 11, 1991

MANCORAD Radio Club
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Manitowoc, WI 54221-0204

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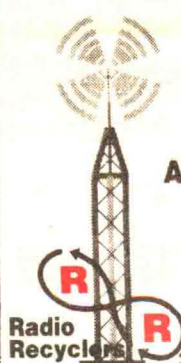
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